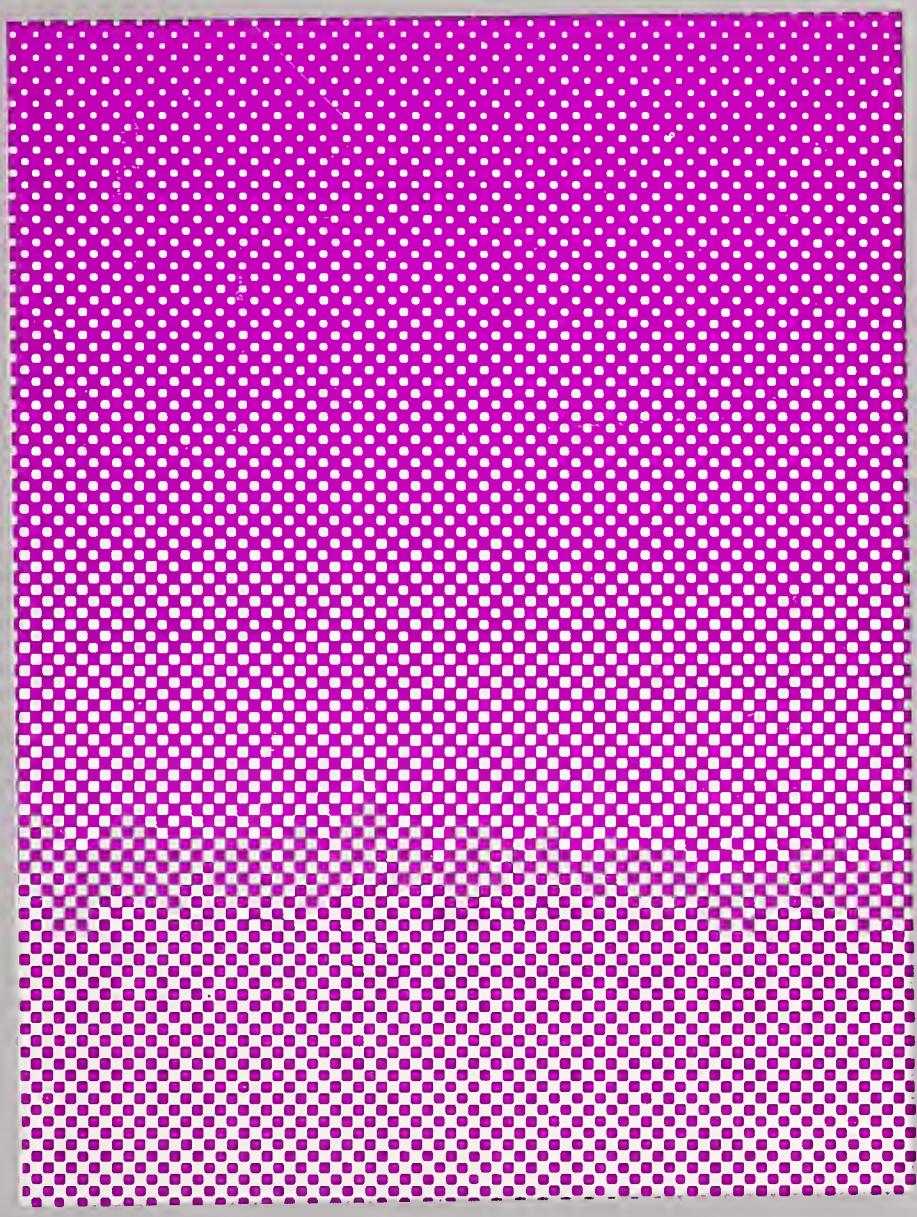
MEDICARE HOSPITAL MORTALITY INFORMATION



Volume VI

Oklahoma – Tennessee

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MEDICARE HOSPITAL MORTALITY INFORMATION

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VOLUME VI

OKLAHOMA - TENNESSEE

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The Health Care Financing Administration (HCFA) was established on March 9, 1977, to combine health financing and quality assurance programs into a single agency. HCFA is responsible for the Medicare program, Federal participation in the Medicaid program, the Peer Review Organization program and a variety of other health care quality assurance programs.

The mission of the Health Care Financing Administration is to ensure the effective administration of our programs in order to promote the timely delivery of appropriate, quality health care to over 56 million of the nation's aged, disabled and poor. The agency must also ensure that beneficiaries are aware of the services for which they are eligible, that those services are accessible and of high quality and that agency policies and actions promote efficiency and quality within the total health care delivery system.

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The Administrator
Washington, D.C. 20201

INTRODUCTION

The nation's Medicare program, which is administered through the Health Care Financing Administration (HCFA) of the Department of Health and Human Services, now has 31 million beneficiaries. One of HCFA's primary responsibilities is to ensure that Medicare beneficiaries receive quality health care. We believe that the publication of the information contained in this document will contribute to that end.

This particular information release, presents information to answer the question: "What is the actual death rate for each hospital compared to what would have been expected for that particular hospital given what we know of the characteristics of patients admitted?" The statistics are presented in the hope that they will serve the public and the hospitals in their common interest of improving quality of care.

The development of mortality statistics is a complicated and controversial task since the mortality rate at a given hospital reflects, among other factors, age, sex, diagnosis, and severity of illness of patients admitted to that hospital, as well as the purpose and quality of the care they received. Characteristics affecting health and the probability of death vary among the patient populations served by individual hospitals. Consequently, the mortality rates in different patient populations will vary.

The usefulness of this information depends upon the accuracy with which mortality rates can be predicted and the stability of these rates over time for each hospital. It is important to understand that the predicted values in the tables contained in this document are not a direct measure of the quality of care rendered in hospitals. There is one primary reason for this. We do not now have any direct measurement tool with which we can adjust fully for differences among hospitals in how severely ill their patients are. For instance, two hospitals might have very different death rates for patients admitted for stroke, even after we have adjusted for age and sex. This might happen because one hospital's stroke patients consist of a significant number admitted in a coma and are thus likely to die, whereas another hospital's patient population represents a broader spectrum of patients with cerebrovascular problems, or because these hospitals in fact provide different levels of quality. In addition, other factors affecting the probability of death in a particular case, e.g., family status/support, and overall health status are not included in the predictive model because information on them is not readily available.

When properly understood and used, this information can be useful; it can also be very misleading if it is interpreted incorrectly. The information simply describes one aspect of individual hospital performance--post admission mortality for Medicare beneficiaries. The information is not necessarily representative of a hospital's total performance in all aspects of patient care, and is best used to view experience in individual hospitals rather than making comparisons among hospitals. Individual hospitals may have very good reasons for their rates being higher than the ranges predicted by HCFA's model. Accordingly, it was important for hospitals to have an opportunity to review their specific information and to provide comments to HCFA and the public. We asked each hospital to prepare its comments on the information being released to the public, and we are including those comments in this publication.

The information is an important contribution to the health care community and should be reviewed by a wide range of individuals and organizations including hospital administrators, Peer Review Organizations, physicians and researchers. Among these audiences, perhaps the hospital administrator will find the information most useful--as a screening tool and in consulting with medical staff to evaluate a hospital's strengths and weaknesses. In this way, the information should lead to analysis and subsequent actions which will capitalize on areas of strong performance and strengthen areas where improvement is needed. For example, we expect that hospitals and their medical staffs, using established and newly emerging quality assessment techniques, will try to determine what useful information can be derived about how they function.

Consumers should read the explanations of the uses and limitations of the information, as well as any comments a hospital may have provided, and should carefully consider the different roles that different hospitals play in their community. For example, one hospital might have different death rates than another because it serves more severely ill patients, because it specializes in difficult illnesses, or because it is a trauma or emergency center.

The development and presentation of this information is an important part of HCFA's responsibilities in the health care community, and follows nearly a full year of effort. In making the information as accurate and useful as possible, we discussed the theoretical framework and statistical approach with a number of national experts in appropriate fields. As a result, we believe the models used in this work are reasonable and appropriate for the intent of the publication. In addition, the format for presentation, the process for sharing the information with individual hospitals, and the statistical methodology have been discussed at a series of meetings with leaders of organizations representing Medicare beneficiaries, doctors and hospitals, and a great many suggestions from these groups have been incorporated into the final approach.

We are continuing to do everything we can to make these types of information more useful to both the public and the health care professions. We are refining ways to use the information as a screening tool for "quality of care" purposes, and we are developing tools to adjust for the differences in disease severity highlighted earlier. In addition, because we recognize that mortality rates alone do not adequately measure how effectively a hospital cares for its patients, we will be developing other measures of outcome, such as the kind of medical treatment needed after discharge, to assess the performance of hospitals more fully.

We have begun what will be a continuing effort involving all interested parties to improve the accuracy of outcome predictions by refining the model and the methodology. This will contribute to assessment of and improvement in the effectiveness of medical services.

William L. Roper M.D.

William L. Roper, M.D.
Administrator

DESCRIPTION OF INFORMATION

Before reading the tables containing the hospital specific information and the comments provided by individual hospitals, it would be useful to understand the format and presentation of the information in this document.

The information is presented in alphabetical order by state and by hospital within the state. For each hospital, information is presented for overall Medicare patient mortality and each of 16 diagnostic categories. The information consists of the number of Medicare patients, the actual mortality rate, and a range of predicted mortality given the mix of patients. It would be helpful to describe how the numbers were derived and what they represent.

- Number of Patients. This figure represents the number of individual Medicare beneficiaries whose last discharge from a short term, acute care hospital in 1986 was from the hospital listed. The total number for each hospital is presented under the category "overall." Similarly, for each diagnostic category, the number of patients consists of the number of Medicare beneficiaries whose last discharge in 1986 was from the hospital cited and whose primary diagnosis fell within the specific diagnostic category. (Generally the number of patients in the sixteen diagnostic categories will total between 70 percent and 80 percent of the figure for "overall." The remaining 20 percent to 30 percent represent diagnoses that do not fall within the 16 diagnostic categories specifically studied.)

  Since only a patient's last hospital discharge is "counted" in the total number, HCFA's computation and that maintained by individual hospitals will generally differ. For example, if John Doe was a patient at Hospital A three times during 1986, the methodology used in HCFA's analysis counts only the last admission in the hospital's total. Normally a hospital will maintain statistics based on numbers of admissions and so would count Mr. Doe as three cases. In addition, in this example, if Mr. Doe were admitted later in the year to Hospital B (another acute care hospital) and then discharged in 1986, and this latter stay represented his last discharge for 1986, his case would be counted in Hospital B's total and he would not appear at all in Hospital A's count.

  The key factor to remember is that we are examining last hospital discharges in 1986. In some cases, this will necessitate the inclusion of patients admitted to the hospital in December 1985 or those who died in January 1987.

- Actual Mortality Rate. This figure presents the percentage of each hospital's Medicare patients who died within 30 days of the admission that resulted in the last-occurring discharge of the patient in 1986. (The percentage is rounded to the nearest whole percentage point.)

  Where, for example, Hospital A had a universe of 1000 patients whose last acute care hospital discharge in 1986 was from Hospital A, and 100 of these patients died within 30 days of that last admission, whether as hospital inpatients or after discharge, the actual mortality rate would be 10 percent. This rate includes cases in which a beneficiary was admitted to the hospital in 1985, was discharged in 1986 and died within 30 days of admission. It also includes those instances in which a beneficiary was discharged in 1986 and died within 30 days of admission even though the 30 day period extends into 1987. Cases in which the beneficiary was not discharged in 1986

are not part of the rate, even though an individual may have died in 1986 or have died within 30 days of last hospital admission. For example, a person admitted to a hospital on December 20, 1985, who was discharged on December 30, 1985 and who died on January 2, 1986 is not part of the calculation since the person was not discharged in 1986. Similarly, a person admitted to a hospital on December 28, 1986 who was discharged on January 5, 1987 and died on January 8, 1987 would not be a part of the calculation even though he or she died within 30 days of a 1986 admission.

- Range of Predicted Mortality. This column gives an estimate of mortality rates for patients equal in number and similar in characteristics to those treated by the hospital. The range is derived in part by determining, based on national experience, the relative risk of dying associated with various patient characteristics: previous hospital admission(s), transfer status, age, sex, and presence of up to eight comorbid conditions (cancer, cardiovascular disease, cerebral degeneration/psychosis, pulmonary disease, renal disease, liver disease, diabetes, hypertensive disease) and by applying weights of the risk factors to the actual number of patients at the hospital to enable compilation of an expected mortality rate. This rate is converted, through statistical techniques, to a range of predicted mortality rates. It is important to note that the fewer the number of cases included in a given diagnostic category, the greater the uncertainty of the expected mortality range, and therefore, the wider the range. A larger number of cases yields greater precision, and therefore, a more narrow range of predicted mortality rates.

HOSPITAL COMMENTS

On September 21, 1987, HCFA mailed to each hospital its own mortality information and asked for comments by October 28, 1987. These comments are arranged alphabetically by state and are included in this publication immediately after the tables presenting information for all the hospitals in a given state. The entry for each hospital on the state charts indicates where to find the hospital's comments and presents a notation (asterisk) advising of the absence of hospital comments. The page number where the comments of the hospital are presented is given next to the name and address of the hospital.

The comments are generally reproduced as submitted by the hospital. However, some hospitals returned to HCFA, an annotated copy of the information sent on September 21. These annotated materials have not been reproduced in this publication, even in those instances where they were the only form of comments submitted by a hospital. The reason for not printing these materials is one of privacy. Information which would identify or possibly identify patients must be deleted, and consequently any remaining information would be very confusing and of extremely limited use, if not totally useless. Therefore, we have included a statement to identify instances when these types of materials have not been included. As mentioned earlier, it is extremely important that the information presented in the tables be reviewed in concert with the hospital's comments.

In any project of this size, there will be instances where hospitals did not receive the information for comment or did not receive it timely. In fact, many hospitals were sent second copies of their specific information in an expeditious manner to allow every opportunity for review/study and comment. Although we have received over 2,600 comments out of a possible 5,971, it is possible that some of the non-responding facilities never got the information or did not have adequate time to comment. However, we expect these instances were few in number.

INFORMATION SOURCES AND NOTES

It is important to note that this publication is based primarily on analysis of Medicare hospital billing information for calendar year 1986. While information about beneficiaries, was obtained from the Social Security Administration (SSA), the principal source for the analysis was the HCFA maintained MEDPAR file which contains information about each Medicare hospitalization. Hospitals submit such information to HCFA's fiscal intermediaries (which pay hospitals for the care provided to Medicare beneficiaries). The file is updated quarterly. It is estimated that billing information on approximately 95% of all Medicare discharges is included in the MEDPAR file within 6 months of the close of the calendar year. Accordingly, our analysis was based on information received through June 30, 1987.

In any large scale data base such as one dealing with Medicare hospitalizations, there will be gaps or inaccuracies. The fact that the files contain information on about 10 million hospital admissions to nearly 6,000 hospitals provides some assurance that for purposes of the statistical analysis conducted here, the information which might be missing or inaccurate is such a small portion of the total that it would have almost no impact on the results.

Nonetheless, while we feel that the information used in this analysis is quite thorough and complete, there are a few points which should be kept in mind as the hospital specific information is being reviewed.

- The information used is billing data and is only as good as the information submitted by hospitals as a part of the payment process. Although there is always a possibility that coding errors are included, the assumption is that hospitals do not make errors on billing forms which ultimately affect payment to them. Likewise, it is assumed that given the link to payment, hospitals have an incentive to submit bills promptly.

- The hospitals included in this analysis are short-term, acute care facilities which were identified by their unique provider number. All facilities which have a zero in the third column of their provider number are by definition participating in Medicare as short-term, acute care facilities. All other facilities--those with something other than a zero in the third column of the provider number--were excluded from the analysis. In some cases, hospital names suggest an orientation different from acute care. This does not mean the facility is inappropriately included in the publication.

- There is some information in the file which does not reflect the results of review by Peer Review Organizations (PROs), the entities charged with reviewing hospital services provided to Medicare beneficiaries. For example, one of the functions a PRO performs is to ensure that the diagnosis assigned to a particular case is accurate. The nature of the review and payment system is such that it is possible for PRO changes in diagnosis assignment not to be submitted to HCFA and associated in the MEDPAR file on as timely a basis as other billing information. Obviously, any major changes in diagnosis assignment which are not reflected in the data base would have a bearing on calculation of mortality rates in individual diagnostic categories and may also have a bearing on the extent to which presence or absence of comorbidities has been reflected accurately.

Some hospitals pointed out instances where the hospital's information did not agree with HCFA's, e.g., different date of death, cases of subsequent admission to another facility, or changes in diagnosis codes. The data base used in this analysis has not been revised to reflect these potential discrepancies. Rather we are examining all hospital comments to ensure that changes to our data systems and processes can be made when warranted so that future releases will be even more accurate. Readers are urged to review any hospital comments with a specific view toward these types of issues.

- The predictive model used in this effort does not explain all variability in outcome. Most notably, a measure of severity of illness has not been included in the model, and therefore, the predictive power of the model is less precise than it would be if such a measure had been available. Nonetheless, the information included in this document does legitimately contribute to the body of information about hospital performance.

Oklahoma

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
AFTON MEMORIAL HOSP AFTON OK 74331	OK-13 *	90	7	2-14	.	.		1	0	1-97	.	.		3	33	2-81	.	.		4	0	0-78	10	20	3-51
ALFALFA CO HOSP CHEROKEE OK 73728	OK-14 *	105	16	8-23	4	50	10-85	3	0	2-81	2	0	0-91	8	25	5-60	4	75	8-83	3	33	3-83	22	18	6-38
AMISUB CLAREMORE REGIONAL CLAREMORE OK 74017	OK-15	620	17	11-19	28	39	15-49	36	36	18-48	19	11	5-41	37	27	15-44	26	23	25-62	27	7	4-34	102	32	12-29
ANADARKO MUNICIPAL HOSPITA ANADARKO OK 73005	OK-16	277	14	9-19	11	18	11-62	11	73	13-64	3	0	1-81	11	45	9-59	8	63	16-76	3	33	2-82	47	13	10-34
ARBUCKLE MEM HOSP SULPHUR OK 73086	OK-17 *	266	15	11-22	7	71	8-70	3	0	3-83	10	20	4-54	30	13	11-41	6	67	12-79	4	25	1-75	79	22	14-34
ARDMORE ADVENTIST HOSP ARDMORE OK 73401	OK-18 *	352	11	7-16	24	33	14-51	17	12	11-52	9	0	2-53	30	33	11-42	7	29	13-76	7	0	1-59	20	20	8-44
ATOKA MEMORIAL HOSP ATOKA OK 74525	OK-19 *	181	20	8-20	4	100	4-78	14	36	10-56	2	50	1-89	14	50	6-48	12	75	18-70	3	0	1-81	20	30	10-47
BAPTIST MEDICAL CENTER OF OKLAHOMA CITY OK 73112	OK-20	4300	10	8-14	309	22	18-33	104	29	18-37	72	21	8-28	228	29	17-30	131	39	27-45	69	17	11-35	263	12	13-25
BAPTIST REGIONAL HEALTH CT MIAMI OK 74354	OK-21 *	1067	11	9-16	57	44	17-43	37	35	18-48	29	17	5-34	51	16	13-36	33	55	26-59	31	19	8-39	113	12	12-29
BARTLETT MEMORIAL MEDICAL SAPULPA OK 74066	OK-22 *	671	15	10-18	22	23	11-49	21	52	14-52	16	13	7-48	30	33	9-39	32	44	23-57	12	25	4-49	108	24	14-31
BASS MEM BAPTIST HOSP ENID OK 73701	OK-23 *	988	12	9-17	111	24	16-36	37	24	18-48	26	4	5-36	51	29	15-39	40	43	27-57	20	5	6-43	99	19	11-28
BEAVER CO MEM HOSP BEAVER OK 73932	OK-24 *	139	16	10-24	7	57	13-76	10	20	9-62	2	0	0-91	15	33	9-51	7	43	12-75	2	0	0-93	29	21	9-39
BETHANY GENERAL HOSP BETHANY OK 73008	OK-25	489	14	9-17	13	15	5-50	31	32	16-48	7	0	2-59	29	24	11-42	24	50	25-64	17	24	7-47	52	33	10-32
BLACKWELL REGIONAL HOSPITA BLACKWELL OK 74631	OK-26 *	562	16	12-21	20	40	10-49	35	40	21-52	16	25	6-45	45	33	16-42	36	36	25-57	9	0	3-55	81	20	12-31
BONE JOINT HOSPITAL OKLAHOMA CITY OK 73103	OK-27 *	756	1	1-9	1	0	0-97	.	.		.	.		1	0	0-98	.	.		.	.		4	25	1-74
BRISTOW MEM HOSP BRISTOW OK 74010	OK-28 *	211	14	9-20	9	56	12-69	11	45	9-60	8	13	2-55	12	33	8-55	6	67	15-82	12	17	6-53	27	7	7-37
BROKEN ARROW MEDICAL CENTE BROKEN ARROW OK 74012	OK-29 *	334	15	10-19	17	41	7-47	9	33	9-63	9	33	3-54	33	21	11-40	14	43	16-64	9	33	4-56	45	22	11-36
BRYAN MEMORIAL HOSP DURANT OK 74701	OK-30 *	642	17	11-19	18	28	10-51	32	34	16-47	3	33	5-85	41	29	13-39	36	33	25-57	55	31	14-41	82	34	15-34
CARL ALBERT INDIAN HEALTH ADA OK 74820	OK-31 *	155	14	8-20	15	53	14-60	6	0	5-67	3	33	1-81	9	33	9-64	3	33	6-86	8	38	2-56	10	0	5-55
CARNEGIE TRI-CO MUNICIPAL CARNEGIE OK 73015	OK-32 *	215	17	11-23	7	57	9-70	9	78	12-68	8	13	2-56	17	29	10-50	6	50	10-75	10	10	1-50	39	8	11-38
CHOCTAW MEMORIAL HOSP HUGO OK 74743	OK-33 *	305	13	9-19	7	71	14-77	11	0	8-58	9	22	2-53	20	60	13-51	10	50	14-69	21	0	5-40	43	16	11-36
CHOCTAW NATION HEALTH SERV TALIHINA OK 74571	OK-34	82	9	5-21	2	50	1-89	3	0	4-85	.	.		5	20	3-70	2	0	3-91	.	.		11	9	8-57
CIMARRON MEMORIAL HOSPITAL BOISE CITY OK 73933	OK-35 *	128	18	10-25	4	75	14-89	4	50	6-81	6	50	5-68	2	0	3-91	11	55	15-67	.	.		43	19	9-33
CITY OF FAITH HOSPITAL TULSA OK 74137	OK-36 *	690	8	6-14	64	17	15-39	11	27	7-56	12	0	4-48	22	23	9-43	15	53	21-68	17	6	5-44	38	24	11-38
CLEVELAND AREA HOSP AUTHOR CLEVELAND OK 74020	OK-37 *	154	10	8-20	8	75	7-64	4	0	3-76	3	0	1-81	6	17	7-72	4	25	8-83	5	20	2-69	31	6	8-37
CLINTON INDIAN HOSPITAL CLINTON OK 73601	OK-38 *	18	0	2-34	.	.		.	.		.	.		1	0	1-97	.	.		2	0	0-90	2	0	0-90

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
AFTON MEMORIAL HOSP AFTON OK 74331	.	.		1	100	2-98	.	.		.	.		2	0	0-100	.	.		1	0	0-100	4	25	0-90	48	0	0-20
ALFALFA CO HOSP CHEROKEE OK 73728	1	100	0-97	2	50	3-91	.	.		.	.		10	0	0-55	4	0	1-74	.	.		4	0	0-82	3	0	0-99
AMISUB CLAREMORE REGIONAL CLAREMORE OK 74017	11	55	9-63	5	20	7-77	21	10	3-33	.	.		67	10	2-16	38	8	1-21	10	0	0-99	38	0	1-19	36	6	1-18
ANADARKO MUNICIPAL HOSPITA ANADARKO OK 73005	4	25	8-84	3	33	7-89	2	0	0-92	.	.		37	5	1-18	22	5	1-29	1	0	0-100	22	5	1-27	10	0	0-57
ARBUCKLE MEM HOSP SULPHUR OK 73086	4	50	2-76	6	17	12-78	.	.		.	.		12	8	0-42	10	0	0-52	.	.		33	3	1-20	12	0	0-70
AROMORE ADVENTIST HOSP AROMORE OK 73401	5	20	4-74	.	.		15	0	1-37	.	.		50	2	1-15	33	3	0-22	2	0	0-100	16	13	0-34	29	3	0-41
ATOKA MEMORIAL HOSP ATOKA OK 74525	1	0	0-98	1	0	1-97	.	.		1	0	0-100	22	5	0-27	1	0	0-100	.	.		17	12	0-32	7	0	0-95
BAPTIST MEDICAL CENTER OF OKLAHOMA CITY OK 73112	50	20	14-47	25	28	20-58	85	11	3-17	13	0	0-100	396	5	3-8	194	5	1-10	44	0	0-25	739	4	3-7	274	1	0-4
BAPTIST REGIONAL HEALTH CT MIAMI OK 74354	20	0	5-46	8	25	14-74	33	3	3-25	.	.		128	1	1-10	52	8	3-21	7	0	0-84	112	2	2-11	79	4	1-10
BARTLETT MEMORIAL MEDICAL SAPULPA OK 74066	8	25	6-65	11	36	12-64	25	8	4-32	.	.		82	7	1-12	34	18	3-25	2	0	0-100	63	5	1-14	30	0	0-23
BASS MEM BAPTIST HOSP ENID OK 73701	9	33	8-65	6	17	9-75	32	3	2-24	1	0	0-100	101	3	1-10	50	6	1-17	9	0	0-100	75	3	2-13	91	1	0-8
BEAVER CO MEM HOSP BEAVER OK 73932	4	0	4-79	1	0	1-97	.	.		1	0	0-100	21	5	1-28	2	0	0-100	.	.		12	0	0-43	2	0	0-99
BETHANY GENERAL HOSP BETHANY OK 73008	8	13	4-63	2	50	2-90	21	5	2-30	.	.		52	8	1-16	26	8	1-25	2	0	0-100	42	2	1-17	30	3	0-27
BLACKWELL REGIONAL HOSPITA BLACKWELL OK 74631	10	30	14-71	3	0	5-86	18	11	3-37	1	0	0-100	70	4	2-15	21	0	1-30	5	0	0-100	53	4	2-16	20	5	0-28
BONE JOINT HOSPITAL OKLAHOMA CITY OK 73103	1	0	0-98	.	.		96	4	4-17	.	.		4	0	0-84	1	0	0-99	.	.		.	.		524	0	0-3
BRISTOW MEM HOSP BRISTOW OK 74010	3	33	4-85	.	.		7	14	0-61	.	.		26	0	2-26	14	7	1-39	3	0	0-100	30	3	1-22	3	0	0-84
BROKEN ARROW MEDICAL CENTE BROKEN ARROW OK 74012	6	33	3-68	9	33	10-66	23	0	3-31	1	0	0-100	46	4	1-16	8	0	1-53	3	0	0-100	28	7	1-24	11	0	0-84
BRYAN MEMORIAL HOSP DURANT OK 74701	3	67	4-85	5	20	7-77	21	0	1-29	1	0	0-100	75	8	1-13	24	8	1-27	8	0	0-59	42	5	1-18	29	0	0-29
CARL ALBERT INDIAN HEALTH ADA OK 74820	3	0	1-82	.	.		.	.		.	.		30	3	1-22	4	0	0-82	3	0	0-100	6	17	0-70	2	0	0-100
CARNEGIE TRI-CO MUNICIPAL CARNEGIE OK 73015	13	31	10-60	8	25	9-68	.	.		.	.		18	6	1-31	5	20	1-67	.	.		17	6	1-32	5	0	0-99
CHOCTAW MEMORIAL HOSP HUGO OK 74743	6	33	6-72	2	0	3-91	2	0	0-92	.	.		32	0	1-21	25	8	3-30	.	.		20	10	0-29	7	0	0-84
CHOCTAW NATION HEALTH SERV TALIHINA OK 74571	2	50	4-92	.	.		1	0	0-97	1	0	0-100	4	0	0-95	3	0	0-96	.	.		9	11	0-58	4	0	0-100
CIMARRON MEMORIAL HOSPITAL BOISE CITY OK 73933	2	0	2-91	.	.		.	.		.	.		19	5	1-30	2	0	0-89	3	0	0-84	9	0	0-60	2	0	0-100
CITY OF FAITH HOSPITAL TULSA OK 74137	4	0	1-76	6	67	13-80	14	0	2-39	7	0	0-100	72	10	2-14	19	0	1-31	10	0	0-81	62	5	1-13	47	0	0-22
CLEVELAND AREA HOSP AUTHOR CLEVELAND OK 74020	3	0	1-83	3	0	5-86	.	.		.	.		24	4	1-25	8	13	1-53	.	.		17	6	1-32	6	0	0-96
CLINTON INDIAN HOSPITAL CLINTON OK 73601	.	.		.	.		.	.		.	.		4	0	0-76	.	.		.	.		1	0	0-100	.	.	

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CLINTON REGIONAL HOSP CLINTON OK 73601	OK-39 *	421	11	9-17	15	33	9-53	15	13	12-56	11	36	5-53	24	13	9-43	14	36	18-66	12	8	4-50	58	26	13-36
COMANCHE MEMORIAL CO HOSP LAWTON OK 73502	OK-40 *	1466	10	9-16	92	18	16-37	74	27	18-39	32	19	9-38	81	25	14-33	52	42	25-51	26	15	5-36	133	14	13-29
COMMUNITY HEALTH CENTER HO WAKITA OK 73771	OK-41 *	61	16	9-28	1	100	0-97	3	0	4-85	2	0	0-92	5	80	5-73	1	0	1-97	3	0	4-84	9	22	7-60
COMMUNITY HOSP ELK CITY OK 73644	OK-42 *	592	14	8-16	32	41	16-49	33	39	18-50	12	17	5-51	18	28	8-46	24	33	25-63	12	25	5-51	43	28	9-34
COMMUNITY HOSPITAL KINGFISHER OK 73750	OK-43 *	276	11	9-19	10	50	8-60	5	20	6-74	9	0	3-55	20	20	9-45	15	53	22-69	5	0	1-69	42	10	10-36
COMMUNITY HOSPITAL LAKEVIE EUFAULA OK 74432	OK-44	275	13	9-19	6	33	2-63	14	36	10-55	9	22	2-53	24	4	8-40	8	13	14-74	16	13	5-46	48	23	10-34
COROELL MEMORIAL HOSP COROELL OK 73632	OK-45 *	204	11	10-22	9	33	8-63	17	18	16-59	5	20	2-68	14	14	10-55	8	25	15-74	5	20	1-68	25	12	7-39
CRAIG GENERAL HOSP VINITA OK 74301	OK-46 *	341	21	10-20	19	68	13-54	29	48	15-48	9	11	1-52	23	39	10-44	18	39	18-61	6	0	2-64	63	24	10-31
CREEK NATION COMMUNITY HOS OKEMAH OK 74859	OK-47	139	14	7-20	2	100	0-90	3	0	3-83	1	0	0-97	9	44	5-57	5	40	9-79	12	25	8-56	13	15	5-49
CUSHING MUNICIPAL HOSP CUSHING OK 74023	OK-48 *	345	14	10-20	5	60	8-78	20	30	13-52	6	33	4-67	21	24	10-46	20	60	23-64	15	13	7-50	49	8	9-32
DEACONESS HOSP OKLAHOMA CITY OK 73112	OK-49	1813	12	8-15	141	18	14-32	73	21	19-41	47	21	9-34	75	15	14-34	71	44	28-52	46	4	7-32	144	27	13-29
DOCTORS GENERAL HOSP OKLAHOMA CITY OK 73103	OK-50	252	12	7-17	7	43	7-69	13	23	10-57	6	0	3-66	6	33	4-66	6	17	15-81	4	75	1-74	28	29	10-41
DOCTORS HOSPITAL TULSA OK 74114	OK-51 *	974	15	8-15	58	28	12-37	46	30	16-42	22	23	8-44	42	33	12-37	32	44	23-56	27	26	7-40	80	28	11-30
DRUMRIGHT MEMORIAL HOSP DRUMRIGHT OK 74030	OK-52 *	295	14	11-21	7	57	12-74	7	57	8-69	1	0	0-97	34	15	10-38	9	44	19-76	14	21	3-44	63	17	12-34
DUNCAN REGIONAL HOSP INC DUNCAN OK 73533	OK-53 *	1196	13	10-17	87	23	13-33	41	32	17-45	29	21	8-39	84	18	15-34	40	30	23-54	35	26	9-38	142	25	14-30
E P CLAPPER MEMORIAL MED C WAYNOKA OK 73860	OK-54 *	75	19	6-22	1	100	1-97	3	100	5-86	2	50	0-90	3	0	2-81	2	50	6-94	1	0	0-100	12	8	5-50
EASTERN OKLAHOMA MEDICAL C POTEAU OK 74953	OK-55 *	629	15	10-18	36	50	12-42	26	35	16-51	13	23	4-46	30	23	10-40	28	54	22-58	24	13	6-40	98	20	13-31
EDMOND MEMORIAL HOSP EDMOND OK 73034	OK-56 *	608	12	8-16	30	13	11-42	17	47	12-53	16	13	3-41	30	13	13-44	17	53	23-67	23	17	6-39	62	19	11-33
ELKVIEW GENERAL HOSPITAL HOBART OK 73651	OK-57 *	465	15	11-20	28	54	23-60	18	33	12-53	16	13	6-46	17	12	8-46	20	55	20-61	27	4	6-38	54	31	16-40
ENID MEMORIAL HOSP ENID OK 73701	OK-58	517	14	8-17	22	27	9-45	23	52	16-53	14	14	7-50	21	29	11-48	15	40	17-63	12	25	3-48	50	32	10-34
FAIRFAX MEM HOSP FAIRFAX OK 74637	OK-59 *	160	9	9-21	5	40	20-90	5	40	7-76	3	0	1-81	3	67	2-81	3	67	12-93	2	0	3-92	39	13	9-35
FAIRVIEW HOSPITAL FAIRVIEW OK 73737	OK-60 *	229	11	8-18	5	60	7-76	11	36	12-63	5	0	3-70	19	26	11-50	7	43	13-75	11	18	3-50	22	14	7-40
GRADY MEM HOSP CHICKASHA OK 73018	OK-61 *	1166	12	10-17	95	23	18-39	47	30	16-42	25	20	6-38	35	20	12-40	38	58	24-55	43	21	10-37	141	16	14-30
GRAND VALLEY HOSPITAL PRYOR OK 74361	OK-62 *	580	19	9-17	34	44	12-42	13	46	10-57	14	21	6-49	40	28	12-39	19	74	22-64	3	33	4-85	75	32	13-34
GROVE GENERAL HOSP GROVE OK 74344	OK-63 *	661	15	9-17	25	56	20-58	20	30	12-51	13	38	3-46	42	21	12-37	27	56	25-61	29	3	4-34	108	19	12-28
HARMON MEMORIAL HOSPITAL HOLLIS OK 73550	OK-64 *	205	12	8-19	6	33	7-71	3	0	5-86	4	0	1-74	13	23	7-52	5	40	16-86	5	0	1-69	25	28	13-48

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CLINTON REGIONAL HOSP CLINTON OK 73601	7	14	7-70	3	0	8-89	3	33	0-88	3	0	0-100	53	2	1-15	29	10	1-24	11	0	0-96	44	2	1-16	10	0	0-78
COMANCHE MEMORIAL CO HOSP LAWTON OK 73502	27	7	6-43	11	36	18-72	49	4	3-21	1	0	0-100	176	3	2-9	93	3	1-13	18	0	0-97	119	5	2-11	88	2	0-9
COMMUNITY HEALTH CENTER HO WAKITA OK 73771	3	33	3-84	.	.		1	0	0-100	.	.		1	0	0-100	4	0	0-76	.	.		8	0	0-54	2	0	0-92
COMMUNITY HOSP ELK CITY OK 73644	7	14	4-66	1	0	1-98	14	14	1-39	3	0	0-100	76	4	1-12	45	2	1-18	12	0	0-99	56	7	1-15	26	8	0-24
COMMUNITY HOSPITAL KINGFISHER OK 73750	7	43	9-72	1	0	2-98	1	0	0-98	.	.		34	0	1-20	12	8	0-43	3	0	0-100	34	0	1-20	6	17	0-87
COMMUNITY HOSPITAL LAKEVIE EUFAULA OK 74432	5	20	2-71	2	50	3-92	.	.		.	.		30	7	1-22	8	0	1-53	.	.		37	5	1-18	6	0	0-90
COROELL MEMORIAL HOSP COROELL OK 73632	9	56	15-74	5	0	4-73	1	0	0-99	.	.		18	0	0-32	7	0	0-65	2	0	0-100	21	0	1-27	4	0	0-98
CRAIG GENERAL HOSP VINITA OK 74301	10	20	5-59	4	25	3-76	.	.		1	0	0-100	52	2	1-15	3	33	0-85	3	0	0-100	43	7	1-16	2	0	0-100
CREEK NATION COMMUNITY HOS OKEMAH OK 74859	4	25	1-76	2	100	4-93	.	.		.	.		14	0	0-38	5	0	0-77	.	.		14	0	0-39	1	0	0-100
CUSHING MUNICIPAL HOSP CUSHING OK 74023	6	33	7-74	5	60	10-81	1	100	0-97	.	.		37	5	2-21	8	13	1-54	7	0	0-100	29	7	0-21	16	0	0-52
DEACONESS HOSP OKLAHOMA CITY OK 73112	18	33	6-49	20	20	19-62	64	11	3-19	18	0	0-91	293	6	2-8	150	7	1-11	57	0	0-54	96	5	2-11	76	3	0-10
DOCTORS GENERAL HOSP OKLAHOMA CITY OK 73103	5	40	2-71	4	75	9-84	6	17	1-62	.	.		21	0	1-28	8	0	0-55	2	0	0-100	22	5	1-28	23	0	0-44
DOCTORS HOSPITAL TULSA OK 74114	7	29	5-67	12	25	10-60	33	12	3-26	6	0	0-99	147	7	2-10	59	14	1-16	7	0	0-100	54	6	1-15	53	0	0-15
DRUMRIGHT MEMORIAL HOSP DRUMRIGHT OK 74030	14	21	12-62	3	67	8-89	3	33	0-85	1	0	0-100	36	0	2-22	5	20	0-77	2	0	0-100	29	0	0-21	10	0	0-91
DUNCAN REGIONAL HOSP INC DUNCAN OK 73533	37	24	10-45	4	50	7-82	52	6	4-22	16	0	0-99	128	9	3-12	62	8	1-16	8	0	0-100	111	2	2-11	70	0	0-11
E P CLAPPER MEMORIAL MEO C WAYNOKA OK 73860	3	67	3-83	.	.		.	.		.	.		9	0	0-51	2	0	0-96	.	.		7	14	0-63	3	0	0-99
EASTERN OKLAHOMA MEOICAL C POTEAU OK 74953	2	0	4-93	3	67	6-87	12	0	1-42	1	0	0-100	86	8	2-13	25	16	2-28	2	0	0-100	56	4	1-14	26	0	0-28
EOMONO MEMORIAL HOSP EOMONO OK 73034	5	40	3-72	8	63	15-75	29	7	3-29	14	0	0-97	80	6	2-13	35	9	1-21	8	0	0-100	30	3	1-22	44	0	0-16
ELKVIEW GENERAL HOSPITAL HOBART OK 73651	10	40	11-67	2	50	1-89	1	0	0-100	1	0	0-100	52	6	2-17	35	6	2-23	8	0	0-100	35	17	2-21	8	0	0-76
ENIO MEMORIAL HOSP ENID OK 73701	5	20	6-76	6	83	14-81	16	6	1-35	2	0	0-100	45	4	1-18	45	11	4-23	5	0	0-100	32	3	1-22	67	1	0-11
FAIRFAX MEM HOSP FAIRFAX OK 74637	3	0	8-90	2	0	5-93	.	.		.	.		19	0	0-30	1	0	0-99	2	0	0-100	20	0	1-30	5	20	0-99
FAIRVIEW HOSPITAL FAIRVIEW OK 73737	1	100	1-97	3	33	5-86	1	100	0-98	.	.		35	0	0-19	7	14	1-57	.	.		23	0	1-26	11	0	0-62
GRAOY MEM HOSP CHICKASHA OK 73018	20	35	7-49	7	14	14-77	28	4	3-29	8	0	0-93	165	4	3-11	82	1	1-14	8	0	0-100	116	4	2-11	39	3	0-17
GRAND VALLEY HOSPITAL PRYOR OK 74361	.	.		5	40	9-79	17	6	2-36	.	.		64	13	2-15	29	24	1-24	6	0	0-100	58	12	1-15	20	5	0-37
GROVE GENERAL HOSP GROVE OK 74344	10	50	8-63	10	50	11-65	12	8	1-42	1	0	0-100	77	4	1-12	18	22	1-33	7	0	0-100	65	3	1-13	49	0	0-14
HARMON MEMORIAL HOSPITAL HOLLIS OK 73550	4	25	7-82	2	100	2-90	.	.		.	.		21	0	1-29	13	8	1-40	.	.		38	5	1-18	20	5	0-44

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HARPER CO COMMUNITY HOSP I BUFFALO OK 73834	OK-65 *	106	18	9-23	3	67	3-83	9	56	10-66	9	22	4-56	9	11	5-57	6	33	8-73	6	17	2-64	9	11	3-54
HASKELL COUNTY HOSP STIGLER OK 74462	OK-66 *	148	19	9-22	5	80	4-72	5	20	5-72	2	50	2-90	12	8	7-54	3	33	5-86	5	20	0-72	33	21	9-38
HCA PRESBYTERIAN HOSPITAL OKLAHOMA CITY OK 73104	OK-67 *	2494	11	9-15	283	26	19-34	52	23	17-42	50	24	9-33	76	18	16-37	71	31	30-54	48	17	10-36	186	17	14-28
HEALOTON MUNICIPAL HOSPITA HEALOTON OK 73438	OK-68 *	175	17	8-20	4	50	5-78	9	22	9-64	1	0	0-100	11	27	5-52	8	63	14-74	6	0	3-66	35	26	9-37
HENRYETTA MEDICAL CENTER HENRYETTA OK 74436	OK-69 *	485	18	11-20	22	41	14-52	32	28	17-48	20	15	8-46	36	28	12-40	20	40	22-63	22	23	6-41	69	30	14-35
HILLCREST HEALTH CENTER IN OKLAHOMA CITY OK 73119	OK-70 *	633	11	7-14	23	22	9-44	25	32	14-48	19	21	3-38	26	12	9-41	14	57	18-66	10	20	2-51	65	17	8-28
HILLCREST MEDICAL CENTER TULSA OK 74104	OK-71 *	2659	12	8-15	180	30	19-36	77	32	19-40	39	18	7-33	120	23	16-32	103	29	27-48	44	25	7-33	191	23	14-27
HOLDENVILLE GENERAL HOSP HOLDENVILLE OK 74848	OK-72 *	423	19	11-20	12	67	14-65	14	36	12-58	9	11	5-57	44	30	13-39	18	56	21-64	21	10	2-36	55	33	14-38
HOMINY CITY HOSP HOMINY OK 74035	OK-73 *	107	7	6-19	2	50	3-92	2	0	4-92	4	0	0-76	5	20	2-69	2	0	4-92	8	13	1-56	23	9	7-40
JACKSON CO MEMORIAL HOSP - ALTUS OK 73521	OK-74 *	1318	9	8-15	53	32	21-49	49	22	18-44	14	7	4-45	65	22	15-36	31	39	24-58	55	9	7-30	123	15	13-29
JANE PHILLIPS EPISCOPAL ME BARTLESVILLE OK 74006	OK-75 *	1832	12	8-15	178	25	15-31	73	22	17-38	39	21	8-35	75	19	14-34	73	42	28-51	39	13	9-37	121	26	13-29
JAY MEM HOSP JAY OK 74346	OK-76 *	149	12	9-22	5	60	6-75	6	17	11-77	3	0	0-86	10	10	5-54	4	0	5-79	5	0	3-70	29	31	10-41
JEFFERSON COUNTY HOSP WAURIKA OK 73573	OK-77 *	206	10	8-19	5	20	4-72	14	29	13-59	1	0	0-100	8	38	5-59	4	25	8-83	6	0	1-64	34	15	9-37
JOHNSTON MEM HOSP TISHOMINGO OK 73460	OK-78 *	306	13	11-21	7	29	9-71	15	33	14-59	6	17	2-64	21	29	10-46	21	38	21-61	7	0	4-64	61	23	12-34
LATIMER COUNTY GENERAL HOS WILBURTON OK 74578	OK-79 *	147	12	7-19	2	100	4-92	2	0	2-90	3	0	0-88	14	36	7-50	4	50	10-86	7	29	4-63	21	14	7-41
LINOSAY MUNICIPAL HOSP LINOSAY OK 73052	OK-80 *	261	12	11-21	11	27	10-61	6	33	8-72	.	.		12	25	10-58	16	19	20-65	7	14	3-62	52	15	12-36
LOGAN CO HEALTH CENTER GUTHRIE OK 73044	OK-81 *	566	14	11-19	36	28	16-48	45	38	18-45	8	0	2-56	31	26	13-44	21	43	24-64	14	7	6-50	73	27	13-34
LOVE CO HEALTH CENTER MARIETTA OK 73448	OK-82 *	259	14	8-18	7	71	13-76	14	29	14-60	4	50	2-74	16	25	11-53	5	40	10-80	3	33	2-82	41	22	9-34
MANGUM CITY HOSPITAL MANGUM OK 73554	OK-83 *	334	14	9-18	7	57	12-75	15	27	11-55	14	36	6-48	33	24	11-40	14	64	15-63	5	20	1-68	40	18	11-37
MARSHALL MEMORIAL HOSP MADILL OK 73446	OK-84 *	441	17	8-17	16	44	16-61	18	22	12-52	4	0	1-74	25	48	10-43	19	53	20-62	21	29	5-41	54	28	8-29
MARY HURLEY HOSP COALGATE OK 74538	OK-85 *	176	14	10-23	3	67	5-86	7	29	7-67	1	0	1-97	7	57	8-69	3	67	10-91	5	0	1-68	42	12	12-38
MCALESTER REGIONAL HEALTH MC ALESTER OK 74501	OK-86 *	1492	16	10-17	105	36	17-38	66	35	19-41	27	37	7-37	90	28	15-33	73	41	28-51	22	23	6-40	171	31	16-31
MCCURTAIN MEMORIAL HOSPITA IDABEL OK 74745	OK-87	623	16	10-18	13	54	14-63	25	28	15-51	17	12	5-43	37	41	11-37	20	50	22-64	14	7	3-45	112	22	14-31
MEMORIAL HOSP GUYMON OK 73942	OK-88 *	255	14	8-18	10	60	9-62	9	11	8-62	11	0	3-50	7	14	3-61	8	50	14-74	8	13	4-59	43	14	9-34
MEMORIAL HOSP COMPANY COLLINSVILLE OK 74021	OK-89 *	198	20	9-20	7	57	8-69	5	40	5-73	3	33	1-81	19	42	11-50	3	67	7-88	14	14	6-49	34	35	11-39
MEMORIAL HOSP OF SOUTHERN AROMORE OK 73401	OK-90 *	1289	13	9-16	84	31	18-40	52	31	18-43	31	6	7-36	62	34	14-36	52	46	26-53	53	23	10-35	122	22	12-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HARPER CO COMMUNITY HOSP I BUFFALO OK 73834	4	75	4-79	1	0	1-97	2	0	0-94	.	.		7	0	0-68	5	20	1-67	1	0	0-100	2	0	0-98	6	0	0-94
HASKELL COUNTY HOSP STIGLER OK 74462	8	38	5-64	1	100	2-98	2	0	0-94	.	.		11	0	0-47	2	0	0-97	.	.		18	17	0-31	7	0	0-66
HCA PRESBYTERIAN HOSPITAL OKLAHOMA CITY OK 73104	13	15	7-57	12	33	18-70	29	10	2-26	136	0	0-7	206	5	3-10	105	3	1-12	24	8	0-34	304	9	3-9	92	0	0-8
HEALOTON MUNICIPAL HOSPITA HEALDTON OK 73438	.	.		2	50	3-91	1	0	0-99	.	.		26	8	1-24	14	7	0-41	1	0	0-100	21	5	1-27	9	0	0-56
HENRYETTA MEOICAL CENTER HENRYETTA OK 74436	9	11	3-58	5	60	7-77	4	0	0-76	.	.		45	7	1-17	30	3	1-24	4	0	0-100	35	9	1-19	13	0	0-42
HILLCREST HEALTH CENTER IN OKLAHOMA CITY OK 73119	9	22	10-68	6	67	11-77	15	0	1-36	2	0	0-100	77	10	2-15	42	7	2-22	7	0	0-100	45	0	1-17	63	0	0-13
HILLCREST MEOICAL CENTER TULSA OK 74104	77	21	8-36	16	50	18-64	67	13	4-19	60	0	0-25	200	8	3-10	110	5	1-13	16	0	0-99	335	5	3-8	141	2	0-6
HOLDENVILLE GENERAL HOSP HOLDENVILLE OK 74848	10	30	5-59	7	57	7-69	2	50	0-89	.	.		42	5	1-18	19	26	4-38	1	0	0-100	39	3	1-18	14	7	0-37
HOMINY CITY HOSP HOMINY OK 74035	1	0	0-98	.	.		.	.		.	.		7	0	0-67	5	0	0-69	.	.		14	0	0-39	1	0	0-100
JACKSON CO MEMORIAL HOSP ALTUS OK 73521	11	18	6-58	22	45	18-58	90	4	5-19	8	0	0-100	161	3	2-10	48	10	2-19	7	0	0-100	119	3	2-10	164	1	0-6
JANE PHILLIPS EPISCOPAL ME BARTLESVILLE OK 74006	7	14	7-71	21	43	17-58	76	8	3-17	10	0	0-100	215	5	3-10	89	2	1-13	32	0	0-23	124	5	2-10	157	3	0-6
JAY MEM HOSP JAY OK 74346	3	33	5-87	3	67	11-93	2	0	0-96	.	.		19	0	0-30	5	0	0-69	.	.		21	5	0-28	3	0	0-100
JEFFERSON COUNTY HOSP WAURIKA OK 73573	5	40	6-76	3	33	4-85	.	.		.	.		33	0	1-21	6	0	0-66	.	.		20	10	1-29	8	13	0-84
JOHNSTON MEM HOSP TISHOMINGO OK 73460	2	0	0-90	1	0	1-97	5	20	0-72	.	.		46	0	1-16	9	0	1-50	6	0	0-98	20	0	1-28	12	0	0-45
LATIMER COUNTY GENERAL HOS WILBURTON OK 74578	2	0	0-90	.	.		.	.		.	.		12	0	1-41	2	0	0-98	.	.		23	9	1-26	12	0	0-60
LINOSAY MUNICIPAL HOSP LINOSAY OK 73052	2	50	8-97	2	0	1-89	4	0	0-81	.	.		32	0	1-22	17	6	2-36	2	0	0-100	23	17	1-27	4	0	0-100
LOGAN CO HEALTH CENTER GUTHRIE OK 73044	7	0	5-67	6	17	10-77	19	0	2-34	.	.		54	9	1-16	15	0	0-38	1	0	0-100	38	3	1-18	32	6	0-22
LOVE CO HEALTH CENTER MARIETTA OK 73448	.	.		1	100	1-97	1	0	0-100	.	.		28	0	1-22	20	0	0-31	1	0	0-100	19	0	0-30	7	0	0-96
MANGUM CITY HOSPITAL MANGUM OK 73554	7	14	5-67	3	67	3-84	1	0	0-100	1	0	0-100	44	2	1-17	4	0	0-81	.	.		23	0	1-25	11	9	0-72
MARSHALL MEMORIAL HOSP MADILL OK 73446	8	25	4-63	4	75	7-82	1	0	0-99	.	.		46	4	1-17	20	0	1-30	2	0	0-100	64	11	2-14	16	6	0-43
MARY HURLEY HOSP COALGATE OK 74538	4	75	9-86	6	0	10-76	.	.		.	.		13	8	1-39	7	0	1-58	1	0	0-100	29	3	1-22	3	0	0-99
MCALESTER REGIONAL HEALTH MC ALESTER OK 74501	9	22	8-65	17	41	15-59	72	8	3-18	4	0	0-100	194	6	3-11	79	8	2-14	19	0	0-98	139	2	2-10	60	0	0-12
MCCURTAIN MEMORIAL HOSPITA IOABEL OK 74745	13	69	13-65	4	75	7-82	4	25	0-79	.	.		59	2	1-15	54	13	3-20	2	0	0-100	58	5	1-14	26	0	0-33
MEMORIAL HOSP GUYMON OK 73942	.	.		5	60	10-80	.	.		1	0	0-100	42	12	1-18	7	29	1-58	.	.		23	9	2-27	10	0	0-89
MEMORIAL HOSP COMPANY COLLINSVILLE OK 74021	3	67	2-83	1	100	0-97	2	0	0-96	.	.		24	8	1-26	10	10	0-48	2	0	0-100	9	0	0-59	9	0	0-87
MEMORIAL HOSP OF SOUTHERN ARDMORE OK 73401	16	31	6-51	9	22	8-63	34	15	2-24	5	0	0-100	149	1	2-10	95	0	1-13	22	0	0-98	103	5	2-11	81	4	0-9

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MEMORIAL HOSPITAL FREDERICK OK 73542	OK-91 *	402	14	10-19	22	55	20-60	11	36	10-60	9	44	5-58	20	30	9-45	18	28	22-66	6	0	2-64	39	15	12-39
MEMORIAL HOSPITAL STILWELL OK 74960	OK-92 *	305	16	13-23	11	45	5-53	12	33	12-62	3	0	0-85	21	29	14-51	17	47	22-67	5	0	3-70	74	19	13-34
MERCY HEALTH CENTER INC OKLAHOMA CITY OK 73120	OK-93	2152	11	8-15	228	21	18-34	49	35	17-43	41	7	7-33	91	30	15-33	65	49	28-53	39	10	5-32	121	19	14-31
MIDWEST CITY MEMORIAL HOSP MIDWEST CITY OK 73110	OK-94 *	1299	13	10-17	80	25	14-36	53	23	17-41	34	15	7-35	84	29	14-32	55	49	27-54	36	25	11-41	141	21	14-30
MISSION HILL MEMORIAL HOSP SHAWNEE OK 74801	OK-95 *	397	16	9-18	24	42	13-50	11	36	12-64	6	0	4-66	24	33	12-46	23	57	19-58	14	14	4-46	51	25	10-33
MOORE MUNICIPAL HOSP OKLAHOMA CITY OK 73160	OK-96 *	176	13	7-18	3	33	1-81	3	0	2-82	6	33	4-68	9	44	6-59	6	67	13-79	2	0	0-92	24	17	9-43
MOOTS OSTEO HOSP PRYOR OK 74361	OK-97 *	83	13	7-23	6	50	8-73	2	0	1-89	4	0	1-75	4	25	4-77	3	67	3-84	3	0	6-87	22	9	4-35
MUSKOGEE REGIONAL MEDICAL MUSKOGEE OK 74401	OK-98 *	2326	13	9-16	159	25	15-32	114	29	21-39	44	16	8-33	128	26	16-32	89	34	30-52	52	19	7-32	206	24	15-29
NEWMAN MEM HOSP SHATTUCK OK 73858	OK-99 *	353	12	7-16	19	32	12-52	9	56	7-61	9	33	2-52	16	31	9-49	6	50	13-79	14	0	2-44	43	23	10-35
NORMAN REGIONAL HOSPITAL NORMAN OK 73070	OK-100	1982	11	10-16	153	20	18-36	68	18	21-44	31	19	8-38	116	18	16-32	63	56	28-53	52	21	11-36	217	20	14-28
NOWATA GENERAL HOSPITAL NOWATA OK 74048	OK-101*	192	20	10-21	5	20	4-72	4	25	5-78	6	33	4-67	15	13	7-49	10	60	17-72	5	0	2-69	28	21	9-40
OKARCHE MEMORIAL HOSP OKARCHE OK 73762	OK-102*	154	11	8-20	1	0	0-98	4	25	7-81	3	67	1-81	19	21	8-45	3	0	6-87	4	0	1-75	24	13	9-42
OKEENE MUNICIPAL HOSP OKEENE OK 73763	OK-103*	183	17	10-23	5	60	4-72	8	38	10-68	12	0	1-44	8	38	5-61	12	75	17-68	6	17	3-66	25	16	9-42
OKLAHOMA OSTEOPATHIC HOSPI TULSA OK 74127	OK-104*	2177	16	9-16	156	32	19-37	66	39	19-42	45	22	7-32	100	29	16-34	87	49	28-49	44	14	6-31	203	28	14-28
OKMULGEE MEMORIAL HOSPITAL OKMULGEE OK 74447	OK-105	651	16	11-19	31	35	16-50	42	50	17-45	6	33	2-63	40	25	13-39	26	50	28-66	35	0	8-37	57	26	13-35
PARK VIEW HOSP EL RENO OK 73036	OK-106*	402	13	10-19	21	38	10-47	13	46	10-56	11	9	2-48	31	29	12-42	13	46	17-66	22	14	6-41	69	16	13-34
PAULS VALLEY GEN HOSP PAULS VALLEY OK 73075	OK-107*	736	14	10-17	28	25	13-46	29	34	15-48	18	22	4-41	54	26	13-36	36	36	25-58	21	14	5-40	118	16	12-29
PAWHUSKA HOSP INC PAWHUSKA OK 74056	OK-108*	186	12	7-19	3	100	4-84	7	29	7-67	2	0	0-92	12	0	7-53	3	0	5-85	7	29	2-60	34	18	8-36
PAWNEE MUNICIPAL HOSPITAL PAWNEE OK 74058	OK-109*	173	13	9-22	8	13	9-67	5	0	6-74	2	0	0-91	10	40	10-63	5	40	10-80	7	29	8-69	27	15	8-39
PERRY MEM HOSP PERRY OK 73077	OK-110*	170	18	12-25	13	62	16-66	20	40	17-57	4	0	2-74	14	29	8-52	7	29	12-75	3	0	0-84	26	15	8-39
PHS INDIAN HOSPITAL CLAREMORE OK 74017	OK-111*	221	8	7-18	14	43	10-56	6	17	5-68	6	0	0-66	12	17	7-54	14	7	17-64	7	14	2-60	19	11	6-41
PHS INDIAN HOSPITAL LAWTON OK 73501	OK-112*	116	9	7-21	3	100	5-85	5	0	2-68	2	0	1-89	8	25	4-59	4	0	8-83	1	0	0-97	12	8	8-56
PRAGUE MUNICIPAL HOSPITAL PRAGUE OK 74864	OK-113*	155	21	12-25	11	55	17-70	18	33	14-55	2	0	0-91	7	14	4-62	13	69	20-70	10	10	2-51	20	15	7-43
PURCELL MUNICIPAL HOSP PURCELL OK 73080	OK-114*	289	16	10-20	9	56	15-73	11	18	10-60	5	0	1-68	11	27	6-53	11	55	14-67	10	0	4-54	73	22	11-31
PUSHMATAHA HOSP ANTLERS OK 74523	OK-115*	316	14	11-20	9	33	10-65	10	10	13-67	11	9	5-53	23	30	9-43	16	75	27-73	6	0	5-68	56	25	14-38
ROGER MILLS MEM HOSP CHEYENNE OK 73628	OK-115*	82	21	9-26	.	.		3	67	4-84	1	0	0-99	2	50	2-90	5	40	11-81	1	0	0-97	21	33	9-44

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MEMORIAL HOSPITAL FREDERICK OK 73542	12	33	10-62	2	100	2-90	1	0	0-98	.	.		70	7	2-14	15	7	0-37	5	0	0-100	35	3	1-20	18	6	0-41
MEMORIAL HOSPITAL STILWELL OK 74960	13	23	13-65	5	40	9-79	1	0	0-97	.	.		36	11	2-22	20	0	1-30	1	0	0-100	21	0	1-28	9	0	0-73
MERCY HEALTH CENTER INC OKLAHOMA CITY OK 73120	18	33	7-51	19	58	18-62	49	12	3-21	5	20	0-100	288	3	3-9	84	7	2-14	40	0	0-55	264	5	3-9	129	1	1-7
MIDWEST CITY MEMORIAL HOSP MIDWEST CITY OK 73110	18	17	7-51	11	91	24-79	39	8	2-22	8	0	0-100	185	4	2-9	58	5	1-16	36	3	0-57	132	2	2-10	45	4	0-15
MISSION HILL MEMORIAL HOSP SHAWNEE OK 74801	2	50	2-91	5	40	9-80	17	6	3-37	.	.		50	6	1-16	15	13	0-37	3	0	0-100	39	5	1-19	15	0	0-61
MOORE MUNICIPAL HOSP OKLAHOMA CITY OK 73160	5	20	4-73	1	0	1-97	6	33	0-64	.	.		23	0	1-26	.	.		.	.		22	0	0-26	13	8	0-87
MOOTS OSTEO HOSP PRYOR OK 74361	2	50	3-91	.	.		1	0	0-100	.	.		8	0	0-62	2	100	0-93	2	0	0-100	3	0	0-96	4	0	0-99
MUSKOGEE REGIONAL MEDICAL MUSKOGEE OK 74401	21	29	9-51	25	60	21-60	111	4	5-17	6	0	0-100	265	7	2-9	104	8	2-13	30	3	0-78	232	3	3-9	220	0	0-5
NEWMAN MEM HOSP SHATTUCK OK 73858	2	50	10-98	2	100	1-89	13	31	1-41	.	.		42	2	1-17	8	0	0-55	8	0	0-100	34	0	1-19	29	0	0-43
NORMAN REGIONAL HOSPITAL NORMAN OK 73070	25	16	5-43	17	41	17-62	71	7	3-18	4	0	0-100	259	5	3-10	124	2	1-12	37	3	0-45	158	4	2-10	86	1	0-9
NOWATA GENERAL HOSPITAL NOWATA OK 74048	5	60	7-78	3	33	6-87	2	0	0-93	.	.		17	6	0-34	8	13	1-53	1	0	0-100	13	15	0-39	6	33	0-87
OKARCHE MEMORIAL HOSP OKARCHE OK 73762	6	50	7-74	1	100	1-97	.	.		.	.		9	0	0-59	10	0	1-47	1	0	0-100	11	9	1-43	6	0	0-74
OKEENE MUNICIPAL HOSP OKEENE OK 73763	8	13	5-63	3	67	6-87	1	0	0-99	.	.		27	11	3-27	6	0	1-62	1	0	0-100	7	0	0-62	5	0	0-98
OKLAHOMA OSTEOPATHIC HOSPI TULSA OK 74127	25	24	9-48	23	78	22-62	73	4	3-18	27	0	0-86	250	8	3-10	109	17	3-14	26	4	0-53	234	5	2-8	135	1	0-7
OKMULGEE MEMORIAL HOSPITAL OKMULGEE OK 74447	5	60	5-75	18	39	23-68	36	3	3-25	3	0	0-100	62	5	2-15	67	0	1-15	5	0	0-100	53	13	2-16	28	0	0-23
PARK VIEW HOSP EL RENO OK 73036	8	13	4-62	5	20	5-73	1	0	0-99	.	.		63	2	1-14	14	7	1-38	.	.		27	0	1-22	9	0	0-87
PAULS VALLEY GEN HOSP PAULS VALLEY OK 73075	12	42	5-54	8	38	10-69	2	100	0-90	.	.		109	2	2-11	20	25	2-31	10	0	0-68	80	5	1-11	17	0	0-52
PAWHUSKA HOSP INC PAWHUSKA OK 74056	2	50	1-90	3	33	6-87	.	.		.	.		24	8	1-26	6	17	0-63	2	0	0-100	14	0	1-37	11	0	0-85
PAWNEE MUNICIPAL HOSPITAL PAWNEE OK 74058	4	25	2-76	3	67	12-93	2	0	0-95	.	.		19	5	1-30	14	0	1-38	2	0	0-100	13	0	0-40	4	0	0-78
PERRY MEM HOSP PERRY OK 73077	6	50	8-75	.	.		.	.		.	.		14	7	1-37	7	0	0-59	.	.		11	0	1-43	5	0	0-95
PHS INDIAN HOSPITAL CLAREMORE OK 74017	2	0	0-98	2	0	2-90	.	.		.	.		28	0	1-22	4	0	0-96	5	0	0-100	26	4	1-24	1	0	0-98
PHS INDIAN HOSPITAL LAWTON OK 73501	7	14	3-65	2	50	2-90	4	0	0-84	.	.		13	8	0-40	4	0	0-81	3	0	0-100	4	0	0-88	4	0	0-89
PRAGUE MUNICIPAL HOSPITAL PRAGUE OK 74864	2	50	8-97	.	.		1	0	0-98	.	.		20	0	0-30	3	33	0-98	2	0	0-100	17	6	0-32	2	0	0-100
PURCELL MUNICIPAL HOSP PURCELL OK 73080	8	63	10-71	2	50	2-90	4	0	0-78	.	.		37	0	1-19	5	40	1-67	.	.		29	3	1-22	10	0	0-63
PUSHMATAHA HOSP ANTLERS OK 74523	5	40	7-77	1	100	3-99	2	0	0-98	.	.		45	0	1-17	8	0	0-60	.	.		42	0	1-17	13	0	0-45
ROGER MILLS MEM HOSP CHEYENNE OK 73628	4	100	11-87	.	.		.	.		.	.		9	0	0-56	5	20	1-67	.	.		12	0	0-43	1	0	0-100

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SAYRE MEMORIAL HOSPITAL SAYRE OK 73662	OK-117*	291	18	12-23	5	40	10-81	16	31	13-56	17	18	6-44	30	17	11-42	16	44	19-65	14	14	3-45	39	26	12-40
SEILING MUNICIPAL HOSPITAL SEILING OK 73663	OK-118	151	14	8-20	4	25	4-77	8	13	8-66	3	33	1-82	8	50	5-61	1	100	1-97	3	33	1-81	31	19	8-37
SEMINOLE MUNICIPAL HOSP SEMINOLE OK 74868	OK-119*	291	15	10-20	7	71	13-77	6	0	7-71	6	33	9-74	22	18	10-46	11	73	18-72	13	38	10-57	55	24	11-34
SEQUOYAH MEMORIAL HOSPITAL SALLISAW OK 74955	OK-120*	338	17	10-20	14	43	15-63	12	33	10-59	4	50	1-74	21	19	10-47	8	25	13-73	19	32	9-49	57	26	13-36
SHARE MEMDRIAL HOSPITAL ALVA OK 73717	OK-121	215	18	10-21	6	67	6-70	5	40	5-73	8	25	3-58	25	36	11-44	8	25	13-73	7	14	4-63	33	27	9-37
SHAWNEE MEDICAL CENTER HOS SHAWNEE OK 74801	OK-122*	1126	13	9-16	91	23	16-37	48	35	19-45	22	14	6-40	49	22	12-35	34	50	22-54	28	14	5-35	110	25	13-29
SOUTH COMM HOSP OKLAHOMA CITY OK 73109	OK-123	2318	14	9-16	155	30	19-36	84	31	19-39	54	17	8-31	131	25	16-31	82	43	27-50	51	18	12-38	188	21	13-27
SOUTHWESTERN MEDICAL CENTE LAWTON OK 73505	OK-124	645	12	9-17	49	29	17-45	45	16	16-43	11	27	5-52	28	11	9-39	19	32	23-65	16	6	6-47	49	35	14-40
ST ANTHONY HOSP OKLAHOMA CITY OK 73102	OK-125*	3829	10	7-14	284	22	18-33	104	29	19-38	73	16	9-30	155	18	16-30	87	40	26-48	45	16	7-33	234	18	14-27
ST FRANCIS HOSP INC TULSA OK 74136	OK-126*	5580	12	9-15	609	26	20-33	147	27	20-36	102	16	8-26	228	30	19-31	263	28	31-45	63	8	6-28	345	24	15-26
ST JOHN MEDICAL CENTER INC TULSA OK 74104	OK-127	4577	10	8-15	379	21	17-32	148	23	20-35	76	26	9-29	218	27	18-31	195	34	30-46	99	17	9-29	249	24	15-28
ST JOSEPH REG MED CTR NDRT PONCA CITY OK 74601	OK-128	1268	15	10-17	85	27	15-36	50	34	18-43	34	24	10-39	85	29	16-34	52	33	23-50	37	19	10-40	119	21	14-31
ST MARY'S HOSPITAL ENID OK 73701	OK-129	1557	10	8-14	149	15	15-33	57	25	18-42	29	14	7-36	67	16	13-34	42	52	23-53	18	6	7-46	88	26	14-32
STATE OF OKLAHOMA TEACHING OKLAHOMA CITY OK 73126	OK-130*	1191	11	8-15	105	19	19-40	22	32	14-51	23	9	6-39	23	22	10-44	29	24	18-53	32	22	8-38	83	23	13-32
STILLWATER MEDICAL CENTER STILLWATER OK 74074	OK-131	1216	11	9-16	68	13	10-32	65	26	19-41	21	10	6-40	81	19	16-35	39	41	30-61	18	17	5-43	114	14	12-28
STROUD GENERAL HOSP STROUD OK 74079	OK-132	187	18	13-25	5	60	6-76	15	40	14-59	4	50	2-74	11	18	7-56	14	43	23-71	13	8	2-45	28	18	13-47
TAHLEQUAH CITY HDSP TAHLEQUAH OK 74464	OK-133*	545	14	10-19	21	38	17-57	25	16	15-51	17	12	3-40	40	18	11-38	22	32	22-62	14	14	4-45	81	28	15-35
THOMAS MEMORIAL HOSP INC THOMAS OK 73669	OK-134*	158	15	9-22	4	50	11-87	9	33	10-66	3	0	0-84	24	33	11-44	3	33	8-89	2	0	0-90	32	22	10-40
US ARMY HOSP FORT SILL OK 73503	OK-135*	1	0	0-100	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VALLEY VIEW REGIONAL HOSPI ADA OK 74820	OK-136*	1459	12	9-16	106	18	15-35	56	29	17-41	47	6	9-33	72	28	13-33	44	36	26-55	37	16	9-38	136	24	14-30
W W HASTINGS INDIAN HOSPIT TAHLEQUAH OK 74464	OK-137	232	13	7-17	7	86	10-72	9	11	8-62	5	20	1-68	14	14	7-49	13	38	14-63	7	14	1-59	17	12	6-44
WAGONER COMMUNITY HOSP WAGONER OK 74467	OK-138*	439	11	10-19	14	29	10-55	20	15	17-57	4	25	2-75	18	28	9-47	9	44	16-74	14	7	7-51	69	23	13-34
WATONGA MUN HOSP WATONGA OK 73772	OK-139*	165	19	10-23	10	70	11-65	8	25	7-63	8	38	5-61	14	7	9-53	3	33	6-86	5	40	5-74	24	33	11-45
WEATHERFORO HOSP AUTHORITY WEATHERFORO OK 73096	OK-140	228	15	10-21	6	33	6-70	15	60	14-59	4	0	1-75	7	14	4-62	8	50	15-75	16	6	5-46	38	21	11-38
WETUMKA GEN HOSPITAL WETUMKA OK 74883	OK-141*	84	8	6-21	1	100	3-99	8	38	7-64	2	0	0-93	8	0	5-61	1	100	2-98	1	0	0-99	3	0	0-84
WEWOKA MEMORIAL HOSPITAL WEWOKA OK 74884	OK-142*	202	29	11-23	8	75	10-69	4	25	5-78	4	25	1-74	17	53	10-51	9	78	17-75	6	0	1-63	30	57	14-46

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SAYRE MEMORIAL HOSPITAL SAYRE OK 73662	7	43	9-73	10	70	16-72	1	0	0-100	.	.		18	6	1-32	9	0	1-50	1	0	0-100	34	6	1-20	6	17	0-80
SEILING MUNICIPAL HOSPITAL SEILING OK 73663	4	0	1-76	1	100	3-99	.	.		.	.		26	4	3-28	13	0	1-40	2	0	0-100	10	10	0-49	2	0	0-100
SEMINOLE MUNICIPAL HOSP SEMINOLE OK 74868	6	0	5-71	1	0	1-97	1	0	0-100	.	.		41	5	1-18	10	10	3-50	.	.		20	0	1-28	7	0	0-97
SEQUOYAH MEMORIAL HOSPITAL SALLISAW OK 74955	10	80	17-74	1	0	0-97	1	0	1-97	.	.		45	4	1-16	27	7	1-25	1	0	0-100	36	3	1-19	6	0	0-76
SHARE MEMORIAL HOSPITAL ALVA OK 73717	3	33	4-85	7	14	9-71	2	50	0-93	.	.		21	5	1-28	3	0	0-84	2	0	0-100	29	0	1-22	4	0	0-99
SHAWNEE MEOICAL CENTER HOS SHAWNEE OK 74801	17	24	6-50	12	17	14-66	60	10	4-20	1	0	0-100	137	6	2-10	65	9	1-15	8	0	0-88	105	1	2-10	68	3	0-11
SOUTH COMM HOSP OKLAHOMA CITY OK 73109	29	31	10-48	39	49	23-56	76	11	4-19	12	0	0-97	279	7	3-9	107	4	2-13	20	0	0-87	238	5	2-8	141	1	0-6
SOUTHWESTERN MEOICAL CENTE LAWTON OK 73505	3	33	2-82	6	33	8-74	18	6	1-33	5	0	0-100	89	4	2-12	27	7	1-25	6	0	0-100	50	6	1-16	57	2	0-12
ST ANTHONY HOSP OKLAHOMA CITY OK 73102	42	24	10-43	43	49	27-59	80	9	4-18	167	0	0-5	249	8	3-10	133	2	1-12	29	0	0-78	570	4	3-7	225	1	0-5
ST FRANCIS HOSP INC TULSA OK 74136	32	22	12-48	65	34	28-56	165	13	6-16	64	2	0-19	510	4	3-8	317	3	1-9	57	2	0-21	643	6	3-7	436	1	1-4
ST JOHN MEOICAL CENTER INC TULSA OK 74104	27	15	8-46	30	30	19-55	136	9	4-16	38	0	0-47	450	4	3-8	224	2	2-10	53	2	0-21	595	4	3-7	296	1	0-4
ST JOSEPH REG MEO CTR NORT PONCA CITY OK 74601	9	11	10-68	10	60	15-71	47	9	3-21	4	0	0-100	130	3	2-11	79	8	1-14	16	0	0-97	86	15	2-14	81	2	0-9
ST MARY'S HOSPITAL ENIO OK 73701	10	20	4-58	3	33	8-89	71	13	4-19	16	0	0-91	160	4	3-12	128	4	1-12	30	0	0-32	71	4	2-14	185	2	0-5
STATE OF OKLAHOMA TEACHING OKLAHOMA CITY OK 73126	28	11	3-39	12	67	16-68	42	2	3-23	.	.		89	7	2-13	45	16	1-18	10	0	0-99	72	7	1-12	85	1	0-10
STILLWATER MEOICAL CENTER STILLWATER OK 74074	15	33	11-59	20	30	13-54	38	8	2-22	11	0	0-98	162	4	2-10	74	4	1-14	11	0	0-100	75	3	2-13	95	4	0-8
STROUO GENERAL HOSP STROUO OK 74079	2	100	7-96	2	50	2-90	1	100	0-98	.	.		25	12	1-26	5	0	0-71	2	0	0-100	11	0	1-44	5	0	0-100
TAHLEQUAH CITY HOSP TAHLEQUAH OK 74464	6	17	4-69	5	20	7-77	8	13	1-53	1	0	0-100	64	5	2-15	25	12	3-31	6	0	0-98	81	4	2-12	15	0	0-47
THOMAS MEMORIAL HOSP INC THOMAS OK 73669	.	.		.	.		1	0	0-98	.	.		17	6	0-33	6	17	0-66	1	0	0-100	3	0	0-98	9	0	0-86
US ARMY HOSP FORT SILL OK 73503	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VALLEY VIEW REGIONAL HOSPI AOA OK 74820	14	36	11-61	15	33	15-62	57	12	3-20	3	0	0-100	153	7	2-10	104	6	2-13	18	0	0-93	125	4	2-11	88	1	0-9
W W HASTINGS INDIAN HOSPIT TAHLEQUAH OK 74464	5	60	8-80	1	100	3-99	1	0	0-99	.	.		39	0	0-17	13	31	1-40	3	0	0-100	34	6	1-19	4	0	0-99
WAGONER COMMUNITY HOSP WAGONER OK 74467	16	19	9-55	5	40	8-79	2	0	0-90	.	.		57	4	2-15	19	5	2-34	2	0	0-100	54	0	1-15	22	0	0-31
WATONGA MUN HOSP WATONGA OK 73772	4	25	2-76	2	50	2-90	1	0	0-100	.	.		15	0	0-36	6	0	2-63	.	.		10	0	0-47	10	0	0-66
WEATHERFORO HOSP AUTHORITY WEATHERFORO OK 73096	8	0	4-62	7	29	9-71	.	.		.	.		21	5	1-28	23	9	2-29	3	0	0-100	17	0	1-32	5	0	0-96
WETUMKA GEN HOSPITAL WETUMKA OK 74883	3	0	4-85	.	.		.	.		1	0	0-100	8	0	0-62	4	0	0-80	.	.		8	0	0-57	.	.	
WEWOKA MEMORIAL HOSPITAL WEWOKA OK 74884	7	14	5-67	11	64	14-67	1	100	0-100	.	.		25	4	1-25	12	17	1-42	1	0	0-100	15	7	0-36	3	0	0-100

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
WILLOW CREST HOSPITAL MIAMI OK 74354	OK-143*	3	0	0-95	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
WOODWARD HOSPITAL AND HEAL WOODWARD OK 738D1	OK-144*	452	13	10-18	21	48	17-57	17	24	12-53	13	15	3-45	23	22	12-47	25	28	21-58	11	9	3-5D	58	28	12-35

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
WILLOW CREST HDSPITAL MIAMI OK 74354	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
WOODWARD HDSPITAL AND HEAL WOODWARD OK 73801	6	33	6-72	2	50	5-94	9	11	1-50	1	0	0-100	70	1	2-14	7	14	1-58	1	0	0-100	57	7	1-15	23	0	0-35

*Written Comments Not Submitted.

Claremore Regional Medical Center
1202 North Muskogee Street, Claremore, Oklahoma 74017 | 918 341-2556

October 22, 1987

Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Mortality Statistics
Medicare Patients for Year 1987
AMISUB(Claremore Regional Medical Center)Inc.
Provider No. 37-0039

Thank you for this opportunity to respond to the release of data on hospital mortality rates for the year 1986.

Claremore Regional Medical Center is a 101 bed acute care facility, whose case mix includes many patients with major medical and surgical illnesses with multiple diagnoses, complications and co-morbidities.

The medical staff at Claremore Regional Medical Center conducts an intensive review of the medical record on every patient who expires at this facility regarding medical management and overall care. Mortality review is an on-going process of the Quality Assurance Committee.

The hospital specific mortality data reported by HCFA has been carefully reviewed by, Hospital Administration, Physician Chairman of the Quality Assurance Committee, Director of Medical Records, and the Director of Hospital Quality Assurance Program. Our overall percentage of deaths is well within the HCFA predicted mortality rates.

The following summarizes our findings on the data reported on DRG - Pulmonary Disease. This data represents 32% or 33 deaths out of 102 cases.

It should be noted that:

1) Eight (8) of these deaths occurred after discharge.
2) One (1) patient had a ruptured aortic aneurysm and expired.
3) The average age of this group of patients was 79 years.

4) The patient or family requested "No Code" on 36% of these patients.
5) 90% of these cases had multiple chronic diseases.
6) 43% of these patients were admitted from nursing homes.

The Medical Staff of Claremore Regional Medical Center, as has been their practice, will continue to review all mortality cases for quality and appropriateness of care rendered to the individual patient. We believe our monitoring system provides us with a continuous feedback mechanism in an effort to continue to meet and exceed quality care standards.

If you should have any questions concerning this report please do not hesitate to contact me.

Sincerely,

Betty W. Walker

Betty W. Walker,
Executive Director

BWW:o

Anadarko Municipal Hospital
Anadarko, Oklahomo

Provider Number: 37-0038

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.

ANADARKO MUNICIPAL HOSPITAL
1002 E. CENTRAL BLVD. ANADARKO, OKLAHOMA, 73005

TO : Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 26684

FROM : Jack D. Martin, Hospital Administrator
Bill Clark, R.R.A., Medical Records Supervisor/Data Analyst

DATE : 21 October 1987

Dear Sir:

Upon receiving the data from HCFA on 09/21/87 regarding the mortality information for Medicare admissions in 1986, the following information was verified to ensure these patients were admitted to the Anadarko Municipal Hospital: Patient ID(HIC) Number; Surname; Diagnostic Category; Age/Sex; Dates of Admission, Discharge and Death; and Principal Diagnosis/Principal Procedure.

A total of thirty-nine(39) deaths were accounted based on the information that was received. In reviewing the records of these patients, it was noted that twenty-eight(28) patients expired in the hospital and eleven(11) patients expired after discharge from our hospital.

Three(3) errors were noted in the data submitted, and these errors are indicated on the attached sheet as outlined in yellow and encircled in red in. These patients are identified below according to the patient ID number:

1) [redacted] - The date of death should reflect 12/23/86 and not 12/31/86.

2) [redacted] - The diagnostic category should reflect ME(metabolic/electrolyte disturbances) and not CE(cerebrovascular accidents). It should be noted that the claim was submitted initially as acute cerebrovascular accident(CVA), however, the diagnosis was later changed by the state's peer review organization to a metabolic/electrolyte diagnosis following their death review of the record.

3) [redacted] - The date of death should reflect 7/4/86 and not 7/5/86.

According to the data submitted to the hospital by HCFA, it was reported that twenty-six(26) deaths had occurred in-hospital and thirteen(13) deaths occurred post-hospital, however following the hospital's review of data and its verification, it was noted that twenty-eight(28) deaths occurred in-hospital and eleven(11) deaths occurred post-hospital. (This may be found on Attachment #5 as enclosed).

In reviewing the data, one(1) of the diagnostic categories fall outside the range of predicted mortality rate, and this involved the CE(cerebrovascular accidents) category. As initially reported by HCFA, eight(8) deaths were reported in this category, however following a review of all records as indicated in third(#3) paragraph above, only seven(7) deaths are actually attributed to the CE(cerebrovascular accidents) category. These seven(7) deaths then represent a rate of 70%(7 deaths/10 cases = 70%), however, this rate still exceeds the range of predicted mortality rate(13-64%) for this particular category.

When reviewing the death records for all cases with emphasis on those deaths as reported in the diagnostic category of CE(cerebrovascular accidents), it was noted that the average age of the seven(7) deaths was 84, and three(3) patients were admitted from the nursing home. In two(2) of the reported seven(7) deaths for this particular category, the patient had been readmitted from a previous stay ranging from 7-19 days. In reviewing the records of the deaths for this category, it was noted that complications and/or co-

(continued on page #2)

ANADARKO MUNICIPAL HOSPITAL
1002 E. CENTRAL BLVD. ANADARKO, OKLAHOMA, 73005

morbidities were indicated, and thus the patient's severity of illness when presenting to the hospital may have affected the outcome. It also has to be mentioned that no underlying cause can be attributed to the deaths for all patients received quality care and treatment with no significant pattern(s) indicated, and furthermore, all deaths are reviewed at the monthly Medical Staff meetings.

No discrepancies were noted in the coding of diagnoses on the patient's medical record which may have resulted in the change of a particular diagnostic category. As mentioned on the previous page, the only change in a diagnostic category resulted from the state's peer review organization having made a change in the diagnosis following their death review of the record.

With the hospital's records indicating 511 Medicare admissions for 1986, 277 cases were reported in the various diagnostic categories as submitted by HCFA representing only 54% of the total Medicare admissions for 1986. Furthermore, based on the 511 Medicare admissions and thirty-nine(39) deaths overall including those deaths which did not occur at the Anadarko Municipal Hospital, a death rate of 7.6% is reported. A death rate of 5.5% is reported when including the twenty-eight(28) deaths that occurred at the Anadarko Municipal Hospital and excluding the eleven(11) deaths that occurred elsewhere.

If further assistance is needed regarding the information as mentioned above, please call 1-405-247-2551 and ask for Jack D. Martin, Hospital Administrator, and/or Bill Clark, R.R.A., Medical Records Supervisor.

Sincerely,

10/21/87
Jack D. Martin, Hospital Administrator

Bill Clark, R.R.A. 10/21/87
Bill Clark, R.R.A., Medical Records Supervisor

ATTACHMENT 4

COMMENTS ON THE HCFA MORTALITY DATA
Memorial Hospital, Middletown, Anystate

Data Verification

The data used by HCFA indicate that a total of 39 Medicare patients admitted to Anadarko Municipal hospital died within 30 days of admission. Of these, 28 died while still a patient of the hospital, while 11 died after discharge. Our own records indicate that 511 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Anadarko Municipal hospital is correct. Our own records also indicate that of the 39 Medicare patients who died within 30 days of admission while still an inpatient, 11 were still alive at the time of discharge. [NOTE: the hospital should submit to HCFA a corrected copy of the patient listing clearly identifying any patients mistakenly coded as dead at the time of discharge.] It is impossible to determine the percentage of the 11 patients dying after discarge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In 1 of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. After correcting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to 1. Several factors may account for this difference.
(remains the same)

Unique Services Resulting in Higher than Average Mortality.

None. However, there was one(1) change in a diagnostic category which was initially indicated as CE(cerebrovascular accidents) category, and this should reflect ME(metabolic/electrolyte disturbances).
(Refer to the attached letter for details).

Results of Prelimary Medicare Record Review.

In reviewing the data as submitted by HCFA, three(3) errors were indicated. The patient's identification numbers are listed below:

1) [redacted]
2) [redacted]
3) [redacted]

The extent of these errors can be found in paragraph #3 as mentioned in the attached letter.

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	1	1	1	1
CE -- Cerebrovascular Accidents	7	1	7	0
GC -- Gastrointestinal Catastrophes	0	0	0	0
GI -- Gastrointestinal Disease	1	1	1	1
GU -- Urologic Disease	0	1	0	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	0	1	0	1
HM -- Severe Chronic Heart Disease	4	1	4	1
HS -- Severe Acute Heart Disease	5	0	5	0
ME -- Metabolic/Electrolyte Disturbances	0	1	1	1
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	5	1	5	1
RN -- Renal Disease	1	0	1	0
SE -- Sepsis	1	0	1	0
TR -- Severe Trauma	0	0	0	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	1	5	2	4
Total -- All Categories	26	13	28	11

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

BAPTIST MEDICAL CENTER OF OKLAHOMA

October 23, 1987

William L. Roper, M.D.
Health Care Finance Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

We have reviewed the mortality statistics submitted from Health Care Finance Administration and are pleased that quality of medical care is being quantified for the use of the public. We feel these statistics are one important indication of quality.

In over 29 years, Baptist Medical Center has remained committed to a high quality, cost effective standard of care and service for both its primary care and its tertiary community referral. We are an active member of the Voluntary Hospitals of America, a group of 761 of America's finest hospitals with quality as an initiative. Thank you.

Sincerely,

Stanley Hupfeld,
Chief Executive Officer
Oklahoma Healthcare Corp.

SH/ds

BETHANY GENERAL HOSPITAL JR ATTN
7600 NW 23RD ST
BETHANY OK 73008 28AM

Western Union Mailgram®

4-029221S301 10/28/87 ICS IPMBNGZ CSP BALB
4057873450 MGMB TDBN BETHANY OK 130 10-28 0454P EST

THE HEALTH CARE FINANCING ADMINISTRATION
ATTN WILLIAM L ROPER, M.D., ADMINISTRATOR
HEALTH STANDARD & QUALITY BUREAU
HOSPITAL MORTALITY INFORMATION
PO BOX 26684
BALTIMORE MD 21207

DATE: OCTOBER 28, 1987

TO: HEALTH CARE FINANCING ADMINISTRATION

RE: BETHANY GENERAL HOSPITAL
PROVIDER #370159

BETHANY GENERAL HOSPITAL WAS ONE PERCENT, AT 33 PERCENT ABOVE THE PREDICTED RANGE OF 10-32 PERCENT OF DEATHS RELATED TO PULMONARY DISEASE, THE FACT THAT TWO PATIENTS DIED AFTER DISCHARGE (ONE PATIENT AT ANOTHER HOSPITAL EVEN), ACTUALLY BRING OUR PERCENTAGE TO 29 PERCENT OR WITHIN THE 10-32 PERCENT.

EIGHTY-EIGHT PERCENT OF THE TOTAL DEATHS WERE PATIENTS WHO HAD MULTIPLE DISEASE PROCESSES WHICH CONTRIBUTED TO THEIR DEATHS.

WE DO NOT FIND THIS DATA TO BE SPECIFICALLY SIGNIFICANT.
RON J. SLOAN, ADMINISTRATOR
BETHANY GENERAL HOSPITAL
7600 NW 23RD ST
BETHANY OK 73008

16:51 EST

MGMCOMP

CHOCTAW NATION
HEALTH SERVICES AUTHORITY

Route 2, Box 1725
Talihina, Oklahoma 74571

October 14, 1987

HOLLIS E. ROBERTS
Choctaw Chief
GREGORY E. PYLE
Assistant Chief

DONALD N. CRAIN
Administrator

William L. Roper
Administrator, Health Care Financing Administration

Dear Mr. Roper:

I have reviewed the mortality information on Medicare patients treated at our hospital in 1986. In two instances, the diagnostic categories are inaccurate:

In the case of patient number [redacted], Surname - [redacted], the diagnostic category should be reclassified as sepsis and gastrointestinal catastrophy. This patient was felt to have a bowel obstruction with sepsis as the cause of death.

The second patient on whom your records are inaccurate is patient number [redacted], Surname - [redacted]. This patient had severe chronic heart disease rather than low risk heart disease. I base this diagnostic categorization on the fact that the patient had had severe coronary artery disease diagnosed by cardiac catheterization and three previous myocardial infarctions before the admission which led to his death due to two more myocardial infarctions. The other five patients listed appeared to have accurate information as to diagnostic category and principle diagnosis.

Thank you for the opportunity to submit comments on Medicare patients who have died following hospitalization here.

Dana Miller Blair, M.D.
Internal Medicine

Community
Hospital
Lakeview

One Hospital Drive
P.O. Box 629, Eufaula, Oklahoma 74432-0629
918-689-2535

October 20, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
U.S. Department of Health & Human Services
Washington, D.C. 20201

RE: Community Hospital Lakeview-
No. 370169

Dear Doctor Roper:

As Chief Executive Officer of Community Hospital Lakeview and Secretary to the Hospital Board of Trustees, I am submitting the following comments on the HCFA Mortality Data which you propose to release in December.

HCFA's Data indicate that Patient No. [redacted]) was admitted to the Hospital on 8/13/86 and died on 8/13/86, notwithstanding that her date of discharge is listed as 8/23/86. According to the Hospital's records, [redacted] did not die in the Hospital on 8/13/86 but was, in fact, discharged alive on 8/23/86. If [redacted] died subsequent to her discharge from the Hospital, Hospital records do not indicate the cause or date of her death.

Of the 35 patients listed as having died within 30 days of their last hospital admission in 1986, apparently 13 died after being discharged. Without listing the cause of death for such persons, the HCFA Data are incomplete and, even worse, may be misleading because they imply a causal relationship between the hospitalization and those persons' deaths. In fact, many totally unrelated causes (such as, for example, accidents, suicides, homocides, other illnesses, etc.) may have intervened to cause these persons' deaths.

Of the 22 Medicare patients who died at the Hospital, all (100%) were over 70 years of age, with 13 (59%) being over 80 years of age. In turn, of those who died at the Hospital, 9 (41%) died within 48 hours of their admissions. Typically, these were Nursing Home residents with chronic, degenerative conditions who were transferred to the Hospital shortly before death.

The Hospital's overall mortality rate for Medicare patients was 13% which was below the median range of mortality rates for all hospitals. Likewise, the Hospital's mortality rate for each diagnostic category was well within HCFA's Range of Predicted Mortality Rates.

As HCFA's own data indicate, ever since the DRG System was implemented in 1983, the average or typical Medicare patient is more acutely ill upon admission to a hospital than was the case prior to 1983, in large measure because of the restrictive Blue Max Admission Criteria. Furthermore, as HCFA is also aware, rural hospitals such as Community Hospital Lakeview typically treat a disproportionately larger percentage of the very acutely-ill Medicare patients than do the bigger, urban hospitals.

Of more importance than mortality statistics is a hospital's on-going monitoring of patient care which not only serves as a better measurement of how well a hospital is serving the needs of all of its patients but also helps identify areas needing improvement. Community Hospital Lakeview's Quality Assurance Program is hospital-wide and reviews not only mortality data but also (and more importantly) 60 other indicators to help evaluate, monitor and insure good medical practice. The Quality Assurance Committee reports its findings and recommendations monthly to both the Medical Staff and the Board of Trustees.

To present a more balanced view, it is requested that HCFA include the foregoing comments with any release of the Mortality Data on the Hospital. The public has a right to know all of the facts and not just a small portion which may tend to cast an unfavorable light on any particular hospital.

Thank you.

Very truly yours,

Jim Robertson Jr.

Jim Robertson, Jr.
Administrator

JR:nfr

Creek Nation Community Hospital

Okemah, Oklahoma

An Independent Agency of Creek Nation

Gary E. Tarter, Administrator

October 12, 1987

Department of Human Services
Health Care Financing Administration
P.O. Box 26676
Baltimore, MD. 21207

SUBJECT: Comments on HCFA Mortality date for
Creek Nation Community Hospital

Dear Sir,

Enclosed are comments from Creek Nation Community Hospital relative to the HCFA Mortality data being proposed for publication by HCFA in December, 1987.

Thank you for the opportunity to react to the data prior to publication. I must continue, however, to state my objections to the publication of this data without better quantification and qualification. Because of the degree of scrutiny of this data by lay individuals and the potential for abuse by competitors, insurance companies, etc., I strongly disagree with its publication in its current form and format.

Your consideration of the above and continued refinement of the data to better represent the individual hospital situation will be greatly appreciated.

Sincerely,

Daniel N. Vaughan
Administrator
Creek Nation Community Hospital

DNV:skw

Enclosures

cc: Mark Downing
Director of Community Services
Creek Nation

309 North Fourteenth Street — P.O. Box 228, Okemah, Oklahoma 74859 — 918/623-1424

Creek Nation Community Hospital

Okemah, Oklahoma

An Independent Agency of Creek Nation

Gary E. Tarter, Administrator

Comments On the HCFA Mortality Data
Creek Nation Community Hospital
Okemah, Oklahoma

Data Verification

The data used by HCFA indicates that a total of 20 Medicare patients admitted to Creek Nation Community Hospital died within 30 days of admission. Of these, 13 died while still a patient in the hospital, whereas 7 died after discharge according to HCFA data.

Creek Nation Community Hospital records indicate that 254 Medicare admissions occurred in 1986. This compares with 139 cases in the HCFA data. We have no way of knowing why this discrepancy exists or verifying whether the number of Medicare patients treated at our facility is correct.

Our own records indicate that of the 20 Medicare patients listed in the HCFA data as dying within 30 days of admission, 7 of these patients were still alive at the time of discharge. It is impossible for us to determine the percentage of the 7 patients dying after discharge who were in fact alive, as information concerning death after discharge is not routinely made available to us nor is it included as a part of the medical record.

Without detailed information concerning the billing data to HCFA in computed predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In only two of the seventeen diagnostic categories in which mortality rates have been calculated did Creek Nation Community Hospital fall outside of the range of predicted mortality rates. In the majority of the categories, Creek Nation Community Hospital was actually below the mid-point of the range of predicted mortality rates.

The two areas in which Creek Nation Community Hospital was outside the range are Cancer and Sepsis. In each instance, the category showed only 2 cases. A review of these cases revealed the following:

- Cancer Patients (2)

  --65 year old male with a history of 30 pound weight loss in 4 months. He was admitted for shortness of breath, but on exam was found to have a mass in the left abdomen. Work-up revealed a high liklihood of cancer with metastatic disease. Patient was not a good risk for surgery due to his cachetic condition. Patient became acidotic due to continued renal function decline and expired of cardiopulmonary arrest on the ninth hospital day.

309 North Fourteenth Street — P.O. Box 228, Okemah, Oklahoma 74859 — 918/623-1424

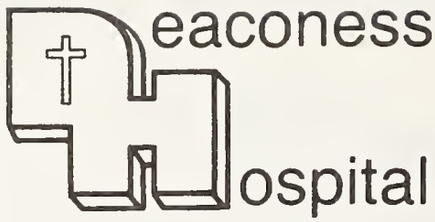
--58 year old male admitted with a past history of adenocarcinoma of the Ampulla of Vater. Patient was in the final stages of his disease and admitted due his declining physical condition. The complicating factors in this case were dehydration and cachexia. The family and the patient were in agreement that no heroic measures should be taken and the patient expired on the second hospital day.

° Sepsis Patients (2)

--64 year old female residing in a nursing home with a long-standing history of COPD. Patient was admitted with gram negative septicemia and expired from septic shock on the second hospital day. The patient had been hospitalized three times within the last eighteen months for respiratory tract illnesses.

--103 year old nursing home resident with a long history of organic brain syndrome, congestive heart failure, and hypothyroidism. She had been admitted in the past for sepsis due to a chronic indwelling Foley Catheter. She was treated with IV antibiotics and discharged back to the nursing home in stable condition. We cannot verify the circumstances surrounding her death nor the cause of death.

DNV:skw



October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

Gentlemen:

Deaconess Hospital responds to the mortality information proposed to be published by the Health Care Financing Administration as follows:

1. The overall average age of Deaconess Hospital's Medicare patients who died was 81 years, which is well above the average life expectancy of 73.2 years in the United States. In spite of this, the HCFA mortality rates for Deaconess Hospital are well within the predicted and acceptable range in every category.

2. The most important factor which HCFA did not take into account in preparing its data was the severity of illness of the patients admitted to Deaconess Hospital, many of whom were advanced in age and were terminally ill at the time of admission.

3. The HCFA data are not a true measure of hospital quality because the data include all persons who died within thirty days of their last hospital admission, whether or not the deaths were related to the admitting diagnosis, or related to the diagnosis to which they were assigned by HCFA.

4. One fourth of all deaths charged to Deaconess Hospital occurred after the patients left Deaconess Hospital, and we have *no* way of determining whether those deaths were related in any way to the hospitalization at Deaconess Hospital.

5. The mortality data are not an accurate reflection of the quality of care at Deaconess Hospital. Many other procedures and systems to review and determine quality are available, and are used by Deaconess Hospital, including review of readmissions, nosocomial infections, in-hospital events, surgical complications, suspected adverse drug reactions, and quality assurance review of professional performances by health care personnel and physicians.

A Ministry of The Free Methodist Church of North America
5501 North Portland, Oklahoma City, Oklahoma 73112-2097 405/946-5581

6. Deaconess Hospital provides a number of high risk medical and surgical procedures including open heart surgery, cancer treatment, emergency services, and very sophisticated diagnostic equipment, resulting in, perhaps, a larger proportion of severely ill patients than the average acute care institution of comparable size.

7. Deaconess' high quality health care and excellent reputation for compassionate, patient-focused care lead many patients to return to the hospital each time they need care and, indeed, often when a loved one is seriously or terminally ill, they return to Deaconess Hospital to find comfort and compassion during their terminal illness.

Sincerely,

Melvin J. Spencer
Administrator

MJS:ra:1h2

DOCTORS GENERAL HOSPITAL
1407 N. Robinson Ave., Oklahoma City, Oklahoma 73103
(405) 236-3011

HCFA Tracking

September 29, 1987

Department of Health & Human Services
The Administrator
Washington, D.C. 20201

I have received information sent to us and all information is correct with the exception of a principal diagnosis on patient named [redacted] admitted 6-10-86 and expired 6-23-86. The principal diagnosis code should be 038.1

We have no other comments to make.

Sincerely,

Stella Willingham

Stella Willingham, ART
Director, Medical Records

SW:vm

Enid Memorial Hospital

An Osteopathic Institution *P.O. Box 3467* *Enid, Oklahoma 73702* *(405) 234-3371*

October 23, 1987

COMMENTS ON THE HCFA MORTALITY DATA

RE: THE STATISTICAL METHOD

Any attempt to predict performance in healthcare is unavoidably limited by the very subjective and personal nature of healthcare.

While HCFA has spent considerable effort in formulating its statistical model, the model has not been validated and fails to consider many factors which significantly impact mortality; these include family support and followup care after discharge, the stage of the patient's illness upon admission, the overall health status of the patient and other vital factors. For such reasons, the ability of the model to indicate quality of care is questionable.

Another important factor is the age of the population of this study. Since only Medicare patients are included, the age is higher than the overall patient population, the mortality can be expected to be higher. Persons viewing the figures for any hospital should keep this in mind. In many cases, small sample size may also result in distorted figures.

RE: THE ENID MEMORIAL HOSPITAL DATA

The average age of Enid Memorial Hospital patients included in this report is 80, an advanced age even for Medicare recipients.

Enid Memorial is a referring hospital. The stages of acuity when the patients enter the hospital are very often higher, since less advanced cases remain in the home-town hospital.

22% of the patients listed died after discharge from the hospital. In the period between discharge and death a hospital has no control over patient care. To the hospital's knowledge, the cause of death may, in fact, be unrelated to the reason for hospitalization.

There also is some overlap of dates, with patients from 1985, 1986, and 1987 included in the study. This adds further questions of the study's statistical validity.

CLOSING REMARKS

People should demand and expect quality care from a hospital. They should also remember that each patient entering the hospital is an individual - with health problems and unique circumstances - not a number on a government prepared chart. Reducing the patients to statistics in an attempt to quantify quality lessens the importance of the human element.

McCURTAIN
MEMORIAL HOSPITAL

P.O. BOX 1019
IDABEL, OKLA. 74745
PHONE 405 286-7623

October 23, 1987

COMMENTS ON THE HCFA MORTALITY DATE
McCURTAIN MEMORIAL HOSPITAL
IDABEL, OKLAHOMA

Data Verification

A cursory review of the data used by HCFA revealed the following:

1. Total number of cases in diagnostic category HM should be 54 instead of 37. Also, one of the deaths in this categlry, Totsie Crutchfield, HIC #[redacted] admitted 9-1-86 and discharged 9-4-86, with date of death reported as 9-9-86, should not be attributed to our hospital, as this patient was transferred from here to McCuistian Hospital in Paris, Texas. Therefore, that would be the patient's last admission. With a total of 54 patients in this category and 14 deaths, the mortality rate is 26% instead of the reported 41%, and is therefore within the range of predicted mortality rate.

2. Total number of cases in diagnostic category RN was 13, which agrees with HCFA report, however, one of the deaths reported in this category is[redacted], HIC #[redacted], admitted 4-12-86 and discharged 4-14-86, with date of death reported as 4-29-86, was transferred from here to the VA Hospital in Bonham, Texas. Therefore, total deaths attributed to our hospital should be 8 instead of 9 and mortality rate should be 62% instead of the reported 69%, which puts us in the rage of predicted mortality rate here also.

Of the 17 who expired after discharge from McCurtain Memorial Hospital, 5 were transferred to other hospitals, 9 back to the nursing homes, and 3 expired at home.

All hospital deaths are reviewed by the Medical Records Committee of McCurtain Memorial Hospital, which we will continue to do.

The statistical reliability and validity of data presented to us is viewed with considerable reservations, and we feel that it cannot be used directly as a measure of hospital performance.

Presented by the Quality Assurance Committee of McCurtain Memorial Hospital.

PROVIDER NO: 370013

MERCY HEALTH CENTER

October 19, 1987

Dear Dr. Roper:

I have been requested by my administration to respond to your letter of September 21, 1987 regarding the publication in December of selected mortality information.

I have reviewed your data on Medicare patients who were treated and expired in our hospital or expired within 30 days of discharge. The data is accurate as far as date of admission, date of discharge and the date of death for those patients that expired in the hospital, with the exception of the following two cases:

[redacted] HM 079 1-5-86 1-5-86 D.O.D.: 1-6-86
CE 088 9-22-86 9-26-86 D.O.D.: 9-26-86

In response to your letter in general, we also would like to know what the actual death rate for our hospital is compared to what is expected given the characteristics of patients admitted, but including deaths within 30 days of discharge seems illogical and inconsistent with the methodology used in computing statistics of this kind. Hospitals do not have control over the patients actions once they leave the hospital. Therefore, it appears that if the cause of death was not ascertained to be related to the hospitalization, i.e., automobile accident, plane crash, massive myocardial infarction with no history of heart disease, then these deaths should not be included in the statistics. It would seem that we were being penalized for outcomes that we had no control over.

We also take exception to your view that the information offers hospitals insight into the results of patient care not previously available. In accordance with JCAH standards, all mortality charts, inpatient and emergency room, are reviewed for quality of care by appropriate department, service and/or committee. Statistics are also compiled, reviewed and maintained. Agreed, these reviews do not include deaths within 30 days after discharge, but there are ways to obtain this information if the hospital wants to devote the time and manhours to do so.

As you stated the use of this information can not be used by itself to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals. We all know the general public, in December, will read about this selected mortality information and will make assumptions and decisions based on it. Institutions that provide excellent care can be damaged because of how the public perceives this selected information.

In conclusion, we as an institution feel, if you, the Health Care

MERCY HEALTH CENTER

Financing Administration, want to publish statistics on quality of care rendered by hospitals, then compile a summary on each hospital regarding number of discharges, types of patients treated, i.e., high risk, cancer, stroke, etc, and services rendered. Provide the public a more comprehensive profile of the hospital rather than an isolated statistic that the validity of the computation is questionable, and the statistic itself being the solo criteria for judgement of the quality of care rendered in any institution, lacks credibility.

Thank you for the opportunity to participate in your effort to produce and publish meaningful, accurate information.

Sincerely,

Jean Casey, A.R.T.

Jean M. Casey, A.R.T.
Director
Medical Records Department

cc: Frank Lopez
Chief Operating Officer

4300 WEST MEMORIAL ROAD, OKLAHOMA CITY, OKLAHOMA 73120 (405) 755-1515

NORMAN REGIONAL HOSPITAL

October 23, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Doctor Roper:

I am in receipt of your September 21, 1987 letter in which you have reported the mortality data during 1986 for Norman Regional Hospital, Medicare Provider #[redacted]. Members of my staff and I have reviewed this data and offer the following comments.

I very much support the intent of the Health Care Financing Administration (HCFA) to find a measure of the quality of care rendered at individual hospitals throughout our nation. Further, I appreciate the comments you have made citing the limitations of the current mortality data which HCFA has distributed. Clearly, mortality statistics are but one piece of a very complex puzzle to which all hospitals are dedicated toward drawing together the necessary components for monitoring the delivery of health care to our patients. It is imperative that we, together, strive to accurately reflect all of the indicators which address quality care.

In reviewing the statistics submitted to us, HFCA reported that Norman Regional Hospital experienced a 56% mortality rate in the HS category (severe/acute heart disease). This was slightly outside the range of predicted mortality rates; whereas all of our remaining diagnostic categories were never above the mid-point of the range. To investigate this discrepancy, ICD-9 diagnostic indices for this category were reviewed for our hospital for the period of time January through December, 1986 as well as December, 1986 admissions discharged in 1987. Your statistics showed a caseload of 63 patients in this category; however, our information indicates we experienced a caseload of 115 patients. Readmissions (five patients) and the total 1986 Medicare patients with non-paid claims (nine patients) were factored out, leaving a total of 101 Medicare patients admitted during this period with principal diagnosis of severe/acute heart disease. The mortality rate, based on this revised caseload, would reflect 34% and fall well within the predicted range reported by HCFA. Such a situation suggests that the accuracy of the statistical data needs to be carefully reviewed and evaluated before release.

901 North Porter · P.O. Box 1308 · Norman, Oklahoma 73070
(405) 321-1700

OK 100

Our hospital takes great pride in its quality assurance program. We, ourselves, use mortality as a "generic screen" to indicate further review which is carried out by members of our medical staff before quality judgments can be made. Other components of our generic screens which comprise our comprehensive quality assurance program include: severity of illness upon admission, origin of patient and prognosis, and distinguishing between anticipated and unexpected mortality. It has been pointed out by the American Hospital Association and the Joint Commission on Accreditation of Healthcare Organizations that clinical or outcome indicators are important indicators of quality, but must be reviewed in light of other related indicators.

The quality assurance program at Norman Regional Hospital is designed to enhance patient safety, promote appropriate utilization of services, and reduce the probability of preventable, adverse clinical outcomes. This is achieved through systematic, routine and comprehensive patient care monitoring and evaluation with corrective action and follow-up. This program consists of tracking compliance with standards of care and monitoring patients' adverse outcomes for separate peer review.

Through our respective hospital associations, the American Medical Association, and our local peer review organization, we look forward to working with HCFA in furthering the development of quality standards for reporting to our patients and the public at large. Thank you for this opportunity of sharing my comments with you.

Sincerely,

Craig W. Jones
Administrator

CWJ:kkm

cc: Norman Regional Hospital Authority
R. Layton Runkle, M.D., Chief of Staff
Administrative Group

"PEOPLE CARING FOR PEOPLE"

OOH OKLAHOMA OSTEOPATHIC HOSPITAL
744 West 9th • Tulsa, OK 74127 • (918) 587-2561

October 27, 1987

William L. Roper, M.D., Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Re: Medicare Provider No. 370078

Dear Doctor Roper:

Oklahoma Osteopathic Hospital is a 533 bed tertiary care facility. It is the largest teaching Osteopathic Hospital in the nation and serves as a referral center for many rural hospitals and Osteopathic physicians. Fully one third of our patients are indigent which together with our tertiary status has a significant impact on our mortality statistics.

In reviewing the 18 mortalities in the Urological Disease Diagnostic Category, the following information was extracted:

The average age of the patients was 81 years old (58-95)

15 patients were from Nursing Homes

5 patients died within 24 hours of admission due to Septic Shock

7 patients had "Do Not Resuscitate" orders

1 patient had CPR discontinued at the family request

3 patients expired after discharge from the hospital:
1 patient died 22 days after discharge from a self inflicted gunshot wound to the head.

1 patient expired 16 days after discharge back to the Nursing Home. The patient had previous admissions for Urosepsis and was a long standing total care patient with COPD, Protein Calorie Malnutrition (was receiving enteral feedings), Arteriosclerotic Heart Disease, and Senile Dementia.

1 patient expired 13 days after discharge back to the nursing home due to cardiac arrest.

1 patient expired from an Acute Myocardial Infarction

1 patient was transferred from another acute care facility in Acute Urosepsis, Gross Protein Calorie Malnutrition, Dehydration, a history of Myocardial Infarction, Congestive Heart Failure, Extreme

Hyponatremia with Anasarca and Inanition. On the previous admission to the hospital the physician had tried to get the patient to go to a Nursing Home with a jejunostomy tube, but she refused.

All the patients who expired had many complications and comorbidities such as:

Recurrent Urosepsis
Acute and Chronic CHF
Pulmonary Edema
Unstable Angina
Acute Myocardial Infarction
Acute or Chronic Renal Insufficiency and/or Renal Failure
Cardiac Arrhythmia
Coronary Artery Disease
Anemia
COPD and/or Acute Respiratory Failure
Severe Protein Calorie Malnutrition
Digitalis Toxicity
Pneumonia
Renovascular Hypertension
CVA with Significant Impairment
Arteriosclerotic Vascular Disease
Diabetes Mellitus
Cancer
Alzheimers
Status Epilepticus
Indwelling Foley Catheters in the Nursing Home

The causes of death were the following:

11 deaths were due to cardiopulmonary complications or comorbidities
1 death was from a self inflicted gunshot wound to the head post hospital discharge
6 deaths were attributed to Urosepsis

From this information, it should be concluded that the mortality statistics in the Urological Category for Oklahoma Osteopathic Hospital is high due to the age, extreme complications and comorbidities, pre-hospital settings (Nursing Homes) and the actual causes of death of the patients that were treated.

In reviewing the 18 mortalities in the Sepsis Diagnostic category, the following information was extracted:

The great majority of these patients were quite elderly with 83% being 70 years of age or older, and of those 47% were older than 80 years of age.

Over one half of the patients lived in nursing homes prior to transfer to the hospital. These patients were physically and/or mentally disabled from underlying conditions such as Chronic Brain Syndrome, Alzheimers Disease, previous Cerebrovascular Accidents, or tumors of the brain.

17% of the patients were less than 70 years of age, but all suffered from terminal cancerous conditions or end stage Multiple Sclerosis.

From this information, it is clear that although these patients suffered from infections, their severe underlying conditions, advanced ages, and pre-hospital settings (Nursing Homes), predicted a very poor outcome in their treatment. All of these factors, of course, resulted in higher than predicted mortality rates for Oklahoma Osteopathic Hospital in the Sepsis Diagnostic Category.

Sincerely,

H. Sprague Taveau III, D.O.

KS

H. Sprague Taveau IV, D.O.
Medical Director
Oklahoma Osteopathic Hospital

Okmulgee Memorial Hospital
AFFILIATED WITH SAINT FRANCIS HOSPITAL

Jerry Johnson
ADMINISTRATOR

October 2, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Re: Okmulgee Memorial Hospital Provider No. 370057

Dear Dr. Roper:

In response to the recently released mortality information, I would like to make the following comment and observation.

The data received from your office relative to cerebrovascular accidents reflecting 42 cases with an actual mortality rate of 50% is in error according to our records. Our records reflect 54 cases of which 23 expired, which would place our actual mortality rate at 43% for the cerebrovascular accidents. This is within the range of the predicted mortality rates of 17 to 45 percent.

We will, of course, provide you with the additional information if you so desire.

Sincerely,

OKMULGEE MEMORIAL HOSPITAL

Jerry Johnson

Jerry Johnson, Administrator

JJ/kl

attachment

1401 Morris Drive
P.O. Box 1038
Okmulgee, OK 74447
(918) 756-4233

Seiling Municipal Hospital
Seiling, Oklahoma

Provider Number: 37-0177

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.

SMC
ALVA

October 15, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

To Whom It May Concern:

We have reviewed the enclosed list of deaths that was received by Share Memorial Hospital. Please be advised that according to our records this list contains one error. The error is in regards to patient Hosey, ID# [redacted] The enclosed list indicates date of death as 11/30/86. Our records show that this patient died 11/21/86, within approximately one hour following admission.

We appreciate the opportunity to review this list in advance. If you have any questions regarding this correction, please contact me.

Sincerely,

Al Allee

Al Allee
Administrator

AA/dg

SHARE
MEDICAL CENTER
800 Share Drive – Alva, Oklahoma 73717 405/327 2800

The hospital's cumments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

SOUTH COMMUNITY HOSPITAL
EXECUTIVE OFFICE

October 23, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for this opportunity to respond to the release of data on our hospital mortality rates.

This data compares us only to ourself and we are very pleased that our hospital specific rate falls within HCFA's predicted rate. This occured in each of the sixteen categories as well as the "all causes" category.

Our hospital is a 391 bed general acute care facility. We take care of patients with major medical and surgical illnesses. We are a full service medical center offering care in specialty areas of open-heart surgery, major orthopedic services, cancer, rehabilitative medicine, as well as general medicine and surgery.

Our medical staff committees review every death in our hospital on an ongoing basis. A complete review of the patient record is done. This process allows us to know that our patients receive good medical care.

The hospital specific mortality data reported by HCFA has been carefully reviewed by: the hospital administrators, Chief of Medical Staff, Chairman of Medical Staff Quality Assurance Committee, Director of Care Review (Quality Assurance, Risk Management, Utilization Review, Infection Control), and the Director of Medical Records. We have found that 15% of patients listed by HCFA did not die in our hospital. It is our firm belief that information gathered from a patient's bill without consideration for how ill that person might be, is simply not sufficient.

In carrying out our own review of deaths, we include length of stay, "Do Not Resuscitate" (no code blue) orders, and severity of illness as important factors. Of note, in the HCFA data 20% of our patients had a length of stay of only one (1) day. We feel this

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reflects how very sick these patients were on admission. We also find that in 40-50% of our patients who died, the family of the terminally ill patient has requested a "Do Not Resuscitate" order.

The medical staff of South Community Hospital, as has been their practice, will continue to review all mortality cases for quality and appropriateness of care rendered to the individual patient. Trending analysis from these reviews is a constant endeavor to assist in identifying opportunities to improve patient care.

Thank you for allowing this letter to be published with our data.

Sincerely,

Dan Tipton

Dan Tipton
President

DT:djr

Tom Rine
Executive Director

AMI Southwestern Medical Center

October 26, 1987

Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Attention: Dr. Wm. P. Roper

Re: Comment on the HCFA Mortality Data

Dear Dr. Roper:

The hospital specific mortality data reported by HCFA has been reviewed by hospital representatives and is considered accurate with the following comments.

The data used by HCFA indicate that a total of 79 Medicare patients admitted to AMI Southwestern Medical Center died within thirty days of admission. Of these, 64 died while still a patient of the hospital, while 15 died after discharge.

Our own records indicate that 1022 Medicare admissions occurred in 1986. We have verified that of the 79 Medicare patients who died within 30 days of admission, 15 were still alive at discharge. Of these 15, we have confirmed that all of the deaths did occur as reported.

After reviewing the individual charts, the following statistics indicate that in every case the deaths were expected. From the 64 inpatient admissions:

6 patients expired on the day of admission
8 patients expired one day from admission
5 patients expired two days after admission
There were 14 "NO CODES" found on the charts
7 patients were admitted with death expected, and expired shortly after admission
47 of the 64 admissions had multiple underlying co-morbidities

Fifty-three percent (8 out of 15) of the patients who expired post-discharge had "poor prognosis" on the chart.

The actual Mortality Rate of Medicare patients for the year of 1986 in our facility was 7.7%. Our statistics show 81% of the deaths occurred in areas that are known to have high mortality rates:

Cancer	28%
CVA	15%
Heart Disease	19%
Pulmonary Disease	19%

5602 SW Lee Boulevard P.O. Box 7290. Lawton Oklahoma 73506 405 531-4700

AMI

This hospital is the only facility in this area with radiotherapy services. It is a regional referral center for acutely ill patients transferred from many surrounding hospitals. Because of this, the hospital admits a number of patients where treatment was initiated in another acute care facility.

During 1986 there was no skilled nursing facility in this area. Patients who might otherwise have been treated in a skilled nursing facility were admitted or remained in the acute care facility.

Let it be noted that we do not equate the use of this type of information with clinical quality. This information is only one small indicator of the outcome of care given at this or any other hospital. Further, we do not have a high level of confidence that these numbers accomplish a fair comparison of anything meaningful in hospital competence or quality. However, this data will be incorporated into our ongoing patient management analysis used to monitor the mortality rates of our facility.

Sincerely,

Rosemary Bellino, M.D.
Chief of Medical Staff

Thomas L. Rine
Executive Director

RB:TR:mgm

ST. JOHN MEDICAL CENTER
Medical Excellence • Compassionate Care

Medicare I.D. 370114

RESPONSE TO HCFA MEDICARE MORTALITY DATA

St. John Medical Center serves as a primary indigent care giver in our community. We are a nonprofit, Catholic owned, 750 bed institution. Our services include, in addition to acute care, skilled nursing, drug and alcohol treatment, an extensive adult and pediatric psychiatric unit, and hospice and home health program.

St. John operates as a tertiary care center and, as such, accepts specialty referrals. Our Cardiovascular Institute offers an extensive cardiac rehab program for inpatients and outpatients. Our cancer program provides services for adult and pediatric inpatients and outpatients. It includes for those who are terminally ill, a J.C.A.H. approved hospice program. Our Digestive Disease Center and pulmonary services unit attract referrals from outlying communities, as does our urology services. We operate the only lithotripter in this region.

In evaluating quality of care, there are many factors that must be considered in addition to mortality data. St. John Medical Center has an institution wide system that monitors the quality of care we deliver and we recently received a full three year accreditation from the Joint Commission on Accreditation of Hospitals.

We found some of the H.C.F.A. mortality data to be inaccurate in that three of the expired patients attributed to our facility actually expired in other facilities after transfer there. A fourth patient on our listing had not been in our hospital since 1982, some four years earlier.

1923 South Utica Avenue • Tulsa, Oklahoma 74104 • (918) 744-2345

#8710060304

ST. JOSEPH REGIONAL MEDICAL CENTER
Of Northern Oklahoma, Inc.
A member of the CSJ Health System of Wichita

HSQB: ACTION
CC: Somsak; Jones; Greif

October 2, 1987

DIRECT REPLY DUE 11/3
X REF. 8710030421

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Re: Analysis and verification of the HCFA mortality data of St. Joseph Regional Medical Center, Ponca City, Oklahoma

Dear Dr. Roper:

HCFA data indicates a total of 1268 medicare cases admitted to SJRMC in 1986. Those that died within 30 days of admission were included. Verification of the total medicare cases admitted in the calander year of 1986 revealed a total of 1991. The apparent discrepancies may reflect multiple admissions of the individual patients. Overall HCFA's data indicate that 125 died during hospitalization and 58 died after discharge. It is these numbers that account for the "All Cases Mortality" rate of 15%, noted to be within the predicted mortality range of 0 to 17%.

Further analysis of the data revealed an area, "Low Risk Heart Disease" that encouraged specific additional review. Screening of 13 records revealed that 6 patients died while hospitalized and 7 died within the 30 days of admission. One patient indicated by HCFA as a death, could not be verified as the record does not contain information related to post-discharge death. Five cases were deaths after transfer for specialized care related to cardiac surgery procedures. These patients should not be included in the mortality rate for St. Joseph Regional Medical Center. Patient transfers in this facility are generally made for specialized critical needs not available in our institution. Patients are stabilized and following stabilization are transferred to other facilities for invasive cardiac procedures/surgery, certain neurological and neurosurgical services, pediatric intensive care and high risk obstetrical services. It is also noted that one patient's death was directly related to metastatic cancer and not to the diagnosis associated with the admission date included in the HCFA data. As such, perhaps that case should not be included in HCFA data. As such one should question its inclusion in this category's rate. Two patient records

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revealed potential coding errors which may be related to factors such as incomplete documentation at the time of coding or a DRG that does not fully address the actual condition of the patient at the time of admission and/or discharge. Of the remaining five patients, causes of death included such factors as age-related multiple system disease (three of these five deaths were of patients in excess of 90 years of age), chronic/debilitating conditions, and acute occurrences such as myocardial infarction and massive CVA (stroke). It should also be noted that one of these five deaths occurred in a nursing home.

Thus, it is our opinion that the actual mortality rate for the low-risk heart disease category at this Medical Center should be adjusted to exclude the patients who were transferred to another facility prior to death. This action would seem to be consistent with the methodology used by HCFA after correcting for the incorrect information. Such would provide for an actual rate of 9% which would fall within the predicted range of 2% to 14%. In addition, when considering any type of research data and statistics, one must keep in mind the validity and reliability of the methods used for collection and interpretation. The HCFA data appears to document mortality and not the quality of care at an institution. Such quality can only be measured by the individual institution and its medical staff using recognized and quantifiable professional standards of care. The truth of the HCFA mortality data, as presented, is in the utilization of such by and institution in such internal evaluation.

We appreciate the opportunity for allowing us to respond.

Sincerely,

ST. JOSEPH REGIONAL MEDICAL CENTER OF NORTHERN OKLAHOMA, INC.

Sister Maureen

Sister Maureen Dougherty, CSJ
President and Chief Executive Officer

SMD,NN:mr

Enclosure

MEDICARE NUMBER: 37-0006

ST. MARY'S HOSPITAL

October 26, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

St. Mary's Hospital has a committment to providing quality medical care. Under the leadership of our medical staff, we work continually to understand and evaluate the quality of care provided. As such, we will incorporate the mortality data provided by HCFA in the process of evaluation.

The data used by HCFA indicate that a total of 154 Medicare patients admitted to St. Mary's Hospital died within 30 days of admission. Of these, 122 died while still a patient of the hospital, while 32 died after discharge. Our own records indicate that 2652 Medicare admissions occurred in 1986, while HCFA data shows only 1557 Medicare admissions. Presumably the discrepancy reflects multiple admissions of individual beneficiaries. Our own records also indicate that of the 32 patients who died after discharge, 13 patients were admitted to St. Mary's Hospital Skilled Nursing Facility, and expired while a patient there. It is impossible to determine the percentage of the remaining 19 patients shown as expired after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

It is noted that in none of the diagnostic categories does the hospital's actual mortality rate fall outside of the range of predicted mortality rates.

St. Mary's Hospital is the regional referral center for Northwest Oklahoma. Because of this, many patients with multiple medical problems are referred to us for management. Often the co-existing conditions of these patients contribute to a poorer response to the medical care administered, thus, a poorer outcome for the patient. Services provided at St. Mary's that may have an impact on mortality rates include a regional trauma center, and neurosurgery and neurology services, with a fully equipped neurosurgery area.

305 S. 5th St. • Box 232 • Enid, OK 73702 • (405) 233-6100

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It is important to note that medical record review indicates that in 58% of the cases reviewed, either the patient or the patient's family members requested that no heroic efforts be made in the event of a cardiac or respiratory arrest (i.e. no CPR, no ventilatory assistance, etc.)

Six of the cases reviewed were found to have discrepancies in the diagnostic category assignment or the principal diagnosis code. It is felt that the statistical methods used do not provide an adequate analysis of the data that is used. There is no provision in the statistical method to account for comorbid conditions, expections for outcome, or analysis of deaths occurring after discharge. Mortality rate calculations generally include all discharges occurring during a time period, therefore, a more accurate calculation would be obtained if all discharges or admissions for each Medicare beneficiary were included in the rate calculation.

Corrections in either diagnostic category or principal diagnosis code are listed in parentheses following the field item as received for review.

HIC NUMBER	SURNAME	DX	CATEGORY	ADMIT DATE	DISCHARGE DATE	PRINC. DX.	PRINC. PROC.
[redacted]		UN	(TR)	011686	011786	854.15	89.54
[redacted]		UN	(TR)	070186	070686	854.05	87.03
[redacted]		UN	(SE)	072886	080986	038.1	39.43
[redacted]		UN	(PN)	092486	092786	786.50(415.1)	37.22
The above case was verified by autopsy.							
[redacted]		UN	(SE)	081586	081586	785.59	89.54
[redacted]		UN	(TR)	102586	103186	802.28	92.05

Our further evaluation of the mortality data will assist us in understanding the actual mortality rates at St. Mary's Hospital, and will provide us a means to further assess the quality of care provided here.

Thank you for the opportunity to comment.

Sincerely,

Mary T. Brasseaux

Mary T. Brasseaux
Administrator

STILLWATER MEDICAL CENTER

October 6, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

SUBJECT: Response to Mortality Report - Medicare Number: 370049

Dear Dr. Roper:

We have reviewed the cases identified on the Mortality Report of Medicare patients treated in our hospital in 1986. We find the numbers are correct and the results show us in compliance with the range of Predicted Mortality Rates in all categories.

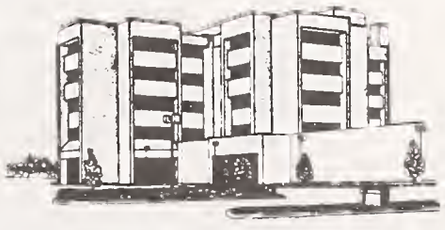
Should we ever have a variance outside the predicted rate, we appreciate the opportunity to review and submit additional information dealing with the variance.

Thank you for this opportunity to respond.

Sincerely,

Robert E. Park,
Administrator

Enc. Copy of Mortality Report
cc: Medical Staff



BOX 2408, STILLWATER, OKLAHOMA 74076/PHONE 405-372-1480

OPERATED BY BAPTIST HEALTH CARE CORPORATION

STROUD MUNICIPAL HOSPITAL
Highway 66 West
918/968-3571

W. MICHAEL SHAWN
Administrator

Box 530
Stroud, Oklahoma 74079

Comments on HCFA Mortality Data 37-0063

Data Verification:

The data supplied by HCFA indicates a total of 187 Medicare patients admitted to Stroud Municipal Hospital. Our own records indicate that 343 Medicare admissions occured in 1986. Presumably the difference reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Stroud Municipal Hospital is correct.

HCFA data indicates a total of 34 Medicare patients admitted to Stroud Municipal Hospital died within 30 days of admission. Of these, 22 died while still a patient in the hospital, while 12 died after discharge. Our own records indicate that 32 Medicare patients died within 30 days of admission and while still an inpatient; 7 were still alive at the time of discharge. It is impossible to determine the percentage of the 7 patients dying after discharge who were in fact alive on discharge, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

We find the following discrepancies in our data and HCFA's. For purposes of identification we will use the numerical sequence in which the patient information is listed up to number 34 which is the final number and the total number of deaths according to HCFA.

2. Age 86 not 87 as shown
4. Date of death 01-21-86 not 01-27-86 as shown
6. Age 87 not 88 as shown
12. Date of death 12-22-86 not 12-31-86 as shown
15. Date of discharge 03-21-86 not 03-20-86 as shown.
23. Date of death 01-04-86 not 01-31-86 as shown
26. Date of death 05-17-86 not 05-18-86 as shown
27. Age 74 not 73 as shown
33. Date of death 11-21-86 not 11-30-86 as shown
34. Age 78 not 77 as shown

Interpretive Remarks:

In only two of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. In one category our sample size is two patients. In the other category, the sample size is one patient. Both sample sizes are too small to be statistically significant, and this should be acknowledged when providing the actual mortality rates and the range of predicted mortality rates to the public. In fact, for this hospital, no sample size exceeds twenty-eight (28).

Signed,

W. Michael Shawn

W. Michael Shawn
Administrator

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

7 October 1987

Address Reply To:
Service Unit Director
PHS Indian Hospital
W.W. Hastings Hospital
100 S. Bliss Avenue
Tahlequah, OK 74464

Refer To: Mortality Data

HCFA
Hospital Standards and Quality Bureau
Hospital Mortality Information
Box 26684
Baltimore, Maryland 21207

Sir:

We are in receipt of your letter requesting comment for the Federal Register on the proposed publication of hospital Medicare mortality data. We thank you very much for this opportunity.

In general, we voice no objection to the proposed publication of such data, however, we do have some reservations concerning the display modes in which you may communicate this information to the public. Specifically, since we are a small facility, we fear the misinterpretation of data derived from simialar hospitals by the public because a few instances of mortality in a small sample significantly change a parameter. A single admission for a condition which results in mortality would lead to a misleading comparison with other hospitals among the unsophisticated segments of the public an. those who will report this data to them.

We request that a criterion of statistical usefulness be adopted and specific indicators of misleading data be part of the data display so that the effect can be ameliorated somewhat.

Sincerely,

James L. Sutton
Quality Assurance Officer

SOUTHWESTERN MEMORIAL HOSPITAL

October 23, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

In regard to your recent letter detailing hospital mortality rates, it was noted that our hospital rated 1% above the expected range in only one area. It is the feeling of the Medical Staff that this should not be considered out of the norm in this instance.

A diagnosis of CVA is not uncommon in elderly patients. If you will observe the ages of those listed, you will note that of the nine, two of the patients were in their upper 70's. The rest range mainly in the upper 80's and evein 90's.

This hospital has a high percentage of older patients. Therefore, it should not be surprising to find more deaths due to CVA's. As stated before, it is not believed to be out of range for a hospital with our particular demographic make-up.

Sincerely,

Melinda A. Heaton, RRA

Melinda A. Heaton, R.R.A.
Director, Medical Record Department

Oregon

Oregon

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALBANY GENERAL HOSPITAL ALBANY OR 97321	OR-7	744	11	8-16	59	12	13-37	28	32	15-49	20	20	4-37	42	19	11-36	38	34	24-55	15	27	3-44	55	15	10-32
ASHLAND COMMUNITY HOSPITAL ASHLAND DR 97520	OR-8 *	347	12	9-18	27	33	11-45	13	23	11-58	15	13	5-46	21	19	9-45	20	35	18-59	8	0	4-60	32	19	10-39
BAY AREA HOSPITAL COOS BAY OR 97420	OR-9 *	1341	10	8-14	116	16	16-35	33	27	14-44	29	14	6-36	45	20	14-39	42	40	24-54	13	15	10-58	86	16	10-29
BESS KAISER MEDICAL CENTER PORTLAND OR 97217	OR-10	2746	9	8-15	281	15	16-31	100	21	19-38	39	21	6-32	118	24	16-32	107	38	29-50	43	7	6-32	163	20	14-28
BLUE MOUNTAIN HOSPITAL JOHN DAY DR 97845	OR-11 *	121	13	4-17	3	0	1-81	3	67	3-83	6	0	0-66	9	33	5-58	3	0	4-84	3	33	0-84	9	22	4-56
CAREUNIT HOSPITAL OF PORTL PORTLAND OR 97209	DR-12 *	45	0	1-18	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CASCADE COMMUNITY HOSPITAL CENTRAL POINT OR 97501	OR-13 *	129	10	5-18	3	33	2-82	3	33	2-82	6	33	1-63	5	20	3-70	6	17	9-74	6	17	1-64	20	10	6-40
CENTRAL OREGON DISTRICT HO REDMOND OR 97756	DR-14 *	386	12	7-16	22	55	10-47	11	27	8-57	6	0	2-64	19	16	10-48	12	25	14-64	8	0	4-59	57	26	11-34
COLUMBIA HOSPITAL ASTORIA OR 97103	OR-15	421	12	8-17	28	29	12-46	14	43	9-53	10	10	8-59	20	45	10-47	17	59	20-64	9	33	4-57	32	16	10-40
COQUILLE VALLEY HOSPITAL COQUILLE OR 97423	DR-16 *	156	10	7-19	7	14	4-63	5	20	6-75	7	0	2-59	11	9	5-52	8	38	12-71	.	.		18	6	6-42
COTTAGE GROVE HOSPITAL COTTAGE GROVE OR 97424	OR-17 *	329	13	10-19	17	35	9-49	20	45	11-49	20	20	4-39	24	13	11-45	18	33	21-65	14	21	5-47	23	4	8-42
CURRY GENERAL HOSPITAL GOLD BEACH OR 97444	DR-18 *	117	14	7-21	3	67	5-85	2	100	1-89	5	0	3-70	6	33	3-65	8	50	8-66	5	20	3-71	23	22	7-39
DOUGLAS COMMUNITY HOSPITAL ROSEBURG OR 97470	OR-19 *	594	12	9-17	49	16	11-37	16	31	12-54	15	20	5-45	29	24	12-44	23	39	22-61	11	18	8-59	68	22	10-31
EASTMORELAND GENERAL HOSPI PORTLAND OR 97202	OR-20 *	530	14	9-17	31	19	9-39	26	19	14-48	18	33	8-48	31	35	11-41	6	50	10-75	29	34	9-41	39	13	11-38
EMANUEL HOSPITAL PORTLAND OR 97227	DR-21	1507	12	9-16	106	29	18-38	67	31	17-39	42	10	8-34	82	30	14-32	43	40	25-55	24	4	5-38	92	17	13-32
EUGENE HOSPITAL AND CLINIC EUGENE OR 97401	OR-22 *	655	11	9-17	37	19	11-40	13	31	9-55	34	24	10-39	44	23	13-39	25	44	24-61	19	11	6-44	50	10	11-34
FOREST GLEN HOSPITAL CANYONVILLE OR 97455	DR-23 *	100	7	8-23	4	25	6-81	6	0	6-70	1	0	0-100	3	0	2-81	6	67	16-82	5	20	2-70	15	0	3-42
FOREST GROVE COMMUNITY HOS FOREST GROVE OR 97116	OR-24 *	186	14	8-19	5	40	3-71	7	14	7-68	9	33	5-58	6	50	4-66	7	29	11-73	4	25	1-74	27	7	8-39
GOOD SAMARITAN HOSP & MEDI PORTLAND OR 97210	DR-25 *	2778	8	7-13	226	23	16-32	69	30	18-40	45	11	6-30	90	13	16-34	68	29	27-52	43	19	9-37	112	17	12-29
GOOD SAMARITAN HOSPITAL CORVALLIS OR 97330	DR-26 *	1131	11	9-16	121	22	17-37	53	17	17-42	25	8	4-35	32	19	12-41	37	54	24-55	15	27	8-51	85	16	13-32
GOOD SHEPHERD COMMUNITY HO HERMISTON OR 97838	OR-27 *	335	12	7-16	15	40	10-54	9	33	9-64	7	14	2-59	10	50	6-56	22	23	19-58	17	6	4-42	18	22	8-47
GRANDE RONDE HOSPITAL LA GRANDE OR 97850	OR-28 *	509	9	7-16	33	18	8-38	12	17	11-59	20	15	4-37	11	18	7-56	21	38	21-61	8	13	3-58	62	11	10-31
HARNEY COUNTY HOSPITAL BURNS OR 97720	DR-29 *	96	14	7-22	2	50	1-89	3	0	3-83	4	0	1-74	8	13	4-58	8	38	13-73	2	0	0-94	15	7	4-43
HARVEY E RINEHART MEMORIAL WHEELER OR 97147	OR-30 *	87	15	6-21	4	25	2-75	2	50	2-90	4	25	1-74	4	50	3-76	2	100	5-94	5	0	0-70	10	30	4-52
HOLLADAY PARK HOSPITAL PORTLAND OR 97232	DR-31	943	9	7-15	67	16	12-34	42	24	17-45	20	10	6-41	44	25	13-39	22	32	25-65	14	0	3-45	59	14	11-32
HOLY ROSARY HOSPITAL ONTARIO, MALHEUR (COUNTY), OR 97914	OR-32 *	869	11	9-16	74	23	16-38	35	34	16-47	16	6	4-43	38	21	12-39	38	32	27-58	21	10	4-39	67	18	10-31

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ALBANY GENERAL HOSPITAL ALBANY OR 97321	12	8	5-55	4	25	5-79	37	5	2-23	1	0	0-100	89	2	2-13	34	0	0-22	8	0	0-100	53	6	1-15	45	2	0-15
ASHLAND COMMUNITY HOSPITAL ASHLAND OR 97520	2	0	0-91	4	0	5-80	24	8	3-31	.	.		26	12	1-24	25	4	0-28	3	0	0-100	24	0	1-25	27	0	0-33
BAY AREA HOSPITAL COOS BAY OR 97420	7	14	4-66	1	0	1-97	39	15	3-25	4	0	0-100	174	9	3-11	77	4	1-14	19	0	0-82	90	4	2-12	138	2	0-6
BESS KAISER MEDICAL CENTER PORTLAND OR 97217	15	13	5-51	14	21	17-66	74	5	4-19	12	0	0-99	297	3	3-9	120	3	1-12	37	0	0-88	264	3	2-8	242	2	0-5
BLUE MOUNTAIN HOSPITAL JOHN DAY OR 97845	3	33	1-82	.	.		4	25	0-87	.	.		22	0	0-27	1	100	0-100	2	0	0-100	10	10	0-48	3	33	0-99
CAREUNIT HOSPITAL OF PORTL PORTLAND OR 97209	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CASCADE COMMUNITY HOSPITAL CENTRAL POINT OR 97501	2	50	0-91	1	0	1-97	1	100	0-98	.	.		12	8	0-43	3	0	0-98	2	0	0-100	10	0	0-50	14	0	0-83
CENTRAL OREGON DISTRICT HO REDMOND OR 97756	4	0	0-78	.	.		8	0	1-53	.	.		53	6	1-14	5	0	0-73	2	0	0-100	31	0	0-20	19	0	0-53
COLUMBIA HOSPITAL ASTORIA OR 97103	9	11	7-64	3	0	4-84	32	3	2-24	.	.		36	0	1-20	25	4	1-26	6	0	0-100	30	7	1-21	52	4	0-13
COQUILLE VALLEY HOSPITAL COQUILLE OR 97423	3	33	1-82	2	0	4-92	.	.		.	.		19	5	0-30	5	0	0-99	2	0	0-100	12	25	0-41	4	0	0-99
COTTAGE GROVE HOSPITAL COTTAGE GROVE OR 97424	5	20	9-80	3	0	3-83	9	0	2-51	.	.		37	5	2-21	22	14	0-29	7	0	0-100	29	3	1-22	10	0	0-90
CURRY GENERAL HOSPITAL GOLD BEACH OR 97444	2	0	0-92	2	0	3-91	2	0	0-94	1	0	0-100	11	0	0-48	4	0	0-93	1	0	0-100	16	0	0-35	5	0	0-99
DOUGLAS COMMUNITY HOSPITAL ROSEBURG OR 97470	5	20	3-73	6	50	13-80	20	10	3-34	4	0	0-100	56	9	3-18	26	4	1-25	6	0	0-100	61	8	1-14	38	5	0-17
EASTMORELAND GENERAL HOSPI PORTLAND OR 97202	6	50	12-80	3	33	5-86	23	9	2-30	1	0	0-100	49	4	2-17	42	2	1-19	6	0	0-100	25	20	1-25	40	3	0-16
EMANUEL HOSPITAL PORTLAND OR 97227	16	6	7-52	19	42	16-59	65	5	5-21	.	.		83	12	2-13	63	3	1-15	13	0	0-97	155	6	2-9	159	1	1-6
EUGENE HOSPITAL AND CLINIC EUGENE OR 97401	15	20	13-62	8	25	12-71	27	7	3-30	.			74	3	2-14	30	0	1-23	12	0	0-95	59	8	1-14	42	5	0-18
FOREST GLEN HOSPITAL CANYONVILLE OR 97455	1	0	0-99	2	0	4-93	1	0	0-97	.	.		14	0	0-41	3	0	0-89	2	0	0-100	11	0	0-44	3	0	0-100
FOREST GROVE COMMUNITY HOS FOREST GROVE OR 97116	2	0	0-92	.	.		5	0	0-77	.	.		28	7	1-22	2	50	0-90	2	0	0-100	7	14	0-58	17	0	0-52
GOOD SAMARITAN HOSP & MEDI PORTLAND OR 97210	31	10	8-44	24	33	19-58	55	5	3-21	120	0	0-7	199	4	3-10	128	1	1-11	29	0	0-32	440	4	3-8	195	1	1-6
GOOD SAMARITAN HOSPITAL CORVALLIS OR 97330	8	25	8-68	8	50	15-75	37	5	3-24	12	0	0-99	101	5	2-12	68	1	1-15	14	0	0-95	94	0	2-12	104	1	0-8
GOOD SHEPHERD COMMUNITY HO HERMISTON OR 97838	1	0	1-97	1	0	1-97	15	0	1-37	.	.		45	7	1-17	4	0	0-77	1	100	0-100	25	4	1-24	42	7	0-16
GRANDE RONOE HOSPITAL LA GRANDE OR 97850	5	0	2-71	1	100	1-97	31	6	4-28	2	0	0-100	67	10	2-15	29	0	1-24	3	0	0-100	31	3	1-21	40	0	0-19
HARNEY COUNTY HOSPITAL BURNS OR 97720	3	67	1-82	.	.		2	0	0-93	.	.		10	0	0-50	1	100	0-100		.		6	0	0-73	3	67	0-90
HARVEY E RINEHART MEMORIAL WHEELER OR 97147	3	33	2-83	3	67	2-82	.	.		.	.		9	0	0-55	1	0	0-100	1	0	0-100	6	0	0-73	5	0	0-88
HOLLADAY PARK HOSPITAL PORTLAND OR 97232	9	44	11-70	7	57	11-74	30	13	2-26	11	9	0-98	116	3	2-12	29	3	1-24	16	0	0-96	53	8	1-15	63	2	0-12
HOLY ROSARY HOSPITAL ONTARIO, MALHEUR (COUNTY). OR 97914	13	23	6-55	7	14	9-71	38	8	4-26	7	0	0-98	107	8	3-13	56	2	1-16	9	0	0-100	61	7	2-15	72	0	0-10

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HOOD RIVER MEMORIAL HOSPIT HOOD RIVER OR 97031	OR-33 *	289	10	8-18	17	41	10-52	20	30	15-54	12	0	3-47	17	24	10-50	10	20	13-67	5	20	1-68	25	12	8-40
JOSEPHINE MEMORIAL HOSPITA GRANTS PASS OR 97526	OR-34 *	646	15	8-16	64	28	13-36	21	38	11-48	11	18	3-49	30	33	11-42	25	28	22-59	13	38	6-52	57	19	12-34
KAISER SUNNYSIOE MEOICAL C CLACKAMAS OR 97015	OR-35	2358	10	9-15	222	14	15-30	129	18	19-35	68	16	8-29	101	25	16-33	79	27	26-49	49	29	9-34	167	17	14-29
LAKE OISTRICT HOSPITAL LAKEVIEW (LAKE COUNTY), OR 97630	OR-36 *	85	11	6-21	2	50	1-89	4	25	3-77	4	0	0-77	5	20	2-69	4	25	8-83	9	0	3-55	9	0	2-52
LEBANON COMMUNITY HOSPITAL LEBANON OR 97355	OR-37	711	10	9-17	48	17	9-34	31	29	15-46	29	14	8-39	40	13	11-38	40	40	24-54	15	7	9-53	70	19	13-34
LOWER UMPQUA HOSPITAL REEOSPORT OR 97467	OR-38	111	23	7-20	13	54	5-49	8	63	8-66	2	50	0-93	8	38	3-57	2	50	2-89	4	0	1-74	10	30	5-55
MALHEUR MEMORIAL HOSPITAL NYSSA OR 97913	OR-39 *	79	20	8-25	4	100	4-78	3	0	2-82	.	.		5	20	4-71	4	100	9-84	6	17	2-65	14	7	4-45
MCKENZIE-WILLAMETTE MEMORI SPRINGFIELO OR 97477	OR-40 *	858	12	8-16	73	16	12-34	35	37	15-45	19	21	7-45	34	12	8-35	21	33	19-59	23	13	7-42	77	18	10-29
MCMINNVILLE COMMUNITY HOSP MCMINNVILLE OR 97128	OR-41 *	616	10	9-16	42	12	7-32	21	48	17-56	12	8	4-49	33	24	12-41	44	25	23-52	26	4	6-38	37	24	10-38
MEOICAL CENTER HOSPITAL PORTLANO OR 97206	OR-42 *	29	3	2-25	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
MERCY MEOICAL CENTER INC ROSEBURG OR (DOUGLAS CO.) 97470	OR-43 *	1012	8	8-15	56	25	15-40	30	17	15-48	31	16	10-40	48	17	13-37	31	29	20-53	22	14	6-40	80	15	11-30
MERIDIAN PARK HOSPITAL TUALATIN OR 97062	OR-44	1234	13	9-16	132	30	17-36	50	26	17-42	49	22	8-31	59	15	15-38	54	35	27-53	9	22	6-60	86	21	11-29
MERLE WEST MEOICAL CENTER KLAMATH FALLS OR 97601	OR-45	1242	11	7-14	88	22	14-35	40	33	16-44	28	14	6-35	44	43	15-41	31	39	22-56	22	5	7-42	130	15	11-26
MID-COLUMBIA MEOICAL CENTE THE OALLES OR 97058	OR-46 *	604	11	8-16	39	23	13-42	23	17	13-49	23	17	4-36	36	25	12-40	16	50	16-60	15	7	6-48	46	9	8-32
MOUNT HOOO MEDICAL CENTER GRESHAM OR 97030	OR-47	632	14	8-16	39	28	12-41	30	40	15-47	14	7	2-42	39	26	11-37	33	52	23-56	15	20	5-47	42	19	12-38
MOUNTAIN VIEW HOSPITAL MAORAS OR 97741	OR-48 *	147	14	7-19	5	0	10-80	4	75	5-78	3	0	3-82	6	17	4-66	1	0	3-99	2	0	0-90	23	17	6-38
NEW LINCOLN HOSPITAL TOLEDO OR 97391	OR-49 *	10	10	1-47	.	.		.	.		.	.		.	.		1	0	1-97	.	.		1	0	0-99
NEWBERG COMMUNITY HOSPITAL NEWBERG OR 97132	OR-50 *	337	12	9-18	16	38	14-59	11	27	12-63	10	10	5-56	19	21	8-45	17	59	21-65	11	18	4-51	37	16	10-37
NORTH LINCOLN HOSPITAL LINCOLN CITY OR 97367	OR-51 *	327	11	10-19	17	41	15-59	9	22	10-65	9	22	3-54	25	12	8-40	22	23	21-61	6	17	5-68	39	18	11-38
OREGON HEALTH SERVICES UNI PORTLANO OR 97201	OR-52	1436	7	6-13	137	15	18-37	21	19	12-49	13	0	3-44	31	13	9-38	38	5	24-55	26	15	6-38	40	18	11-37
PACIFIC COMMUNITIES HOSPIT NEWPORT OR 97365	OR-53 *	372	14	8-17	14	50	10-55	8	13	9-67	13	8	6-50	23	17	8-41	26	38	20-56	15	13	4-45	29	14	7-36
PENOLETON COMMUNITY HOSPIT PENOLETON OR 97801	OR-54 *	25	4	2-29	3	0	1-82	2	0	4-92	.	.		1	0	0-97	.	.		.	.		3	0	1-81
PIONEER MEMORIAL HOSPITAL HEPPNER OR 97836	OR-55 *	34	9	4-27	.	.		.	.		.	.		2	0	1-89	3	33	8-89	3	0	0-87	7	14	1-58
PIONEER MEMORIAL HOSPITAL PRINEVILLE OR 97754	OR-56 *	203	13	7-18	14	0	7-51	10	30	10-62	6	33	2-63	10	10	5-54	7	57	9-70	2	0	0-90	24	13	7-39
PORTLANO AOVENTIST MEOICAL PORTLAND OR 97215	OR-57	1528	11	8-15	140	16	13-30	55	22	19-44	36	17	5-31	61	16	13-34	63	49	26-51	19	0	4-40	109	24	13-30
PROVIOENCE HOSPITAL MEOFORO OR 97504	OR-58 *	1437	9	7-14	102	23	13-32	59	25	17-41	28	14	5-35	42	26	13-40	44	27	24-53	31	16	6-36	102	10	12-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HOOO RIVER MEMORIAL HOSPIT HOOO RIVER OR 97031	2	50	0-93	.	.		9	11	1-50	2	0	0-100	29	0	2-24	7	0	0-67	.	.		21	0	1-27	29	0	0-31
JOSEPHINE MEMORIAL HOSPITA GRANTS PASS OR 97526	2	0	2-90	2	50	3-91	33	18	3-26	.	.		65	5	1-13	27	11	1-25	6	0	0-100	59	7	1-14	61	2	0-12
KAISER SUNNYSIOE MEOICAL C CLACKAMAS OR 97015	25	8	11-51	23	26	18-57	72	4	3-18	11	0	0-100	165	7	2-9	117	1	1-12	34	0	0-77	234	6	2-8	176	1	0-5
LAKE OISTRICT HOSPITAL LAKEVIEW (LAKE COUNTY), OR 97630	1	100	1-97	1	0	1-97	.	.		.	.		15	0	0-40	1	0	0-99	.	.		3	33	0-87	7	0	0-97
LEBANON COMMUNITY HOSPITAL LEBANON OR 97355	5	40	5-75	6	17	6-70	20	15	2-32	1	0	0-100	70	3	2-15	25	0	0-26	10	0	0-72	74	1	1-13	20	0	0-31
LOWER UMPQUA HOSPITAL REEDSPORT OR 97467	.	.		2	0	2-90	6	0	0-63	.	.		14	0	0-40	1	0	0-100	.	.		6	0	0-81	5	0	0-96
MALHEUR MEMORIAL HOSPITAL NYSSA OR 97913	.	.		1	0	2-98	.	.		.	.		9	0	0-51	.	.		1	0	0-100	5	0	0-80	1	100	0-100
MCKENZIE-WILLAMETTE MEMORI SPRINGFIELO OR 97477	8	50	8-68	11	18	12-65	24	13	3-31	1	0	0-100	89	11	2-13	56	7	1-16	17	0	0-99	56	0	2-16	71	6	0-10
MCMINNVILLE COMMUNITY HOSP MCMINNVILLE OR 97128	4	50	6-82	2	50	3-91	24	0	2-29	5	0	0-100	71	3	2-14	40	3	0-21	10	0	0-100	53	4	1-15	27	0	0-38
MEOICAL CENTER HOSPITAL PORTLANO OR 97206	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		1	0	0-100
MERCY MEDICAL CENTER INC ROSEBURG OR (OOUGLAS CO.) 97470	8	25	9-70	12	8	14-65	20	5	4-36	5	0	0-100	96	3	2-13	47	0	1-18	11	0	0-100	119	4	2-10	62	0	0-12
MERIOIAN PARK HOSPITAL TUALATIN OR 97062	8	25	5-63	5	40	9-79	53	6	3-20	1	0	0-100	145	8	2-11	43	5	1-18	11	0	0-100	75	7	2-13	100	2	0-8
MERLE WEST MEOICAL CENTER KLAMATH FALLS OR 97601	9	56	5-61	7	29	8-70	51	10	3-21	6	0	0-100	144	3	2-11	69	1	1-14	7	0	0-100	99	6	2-11	95	1	0-8
MID-COLUMBIA MEOICAL CENTE THE OALLES OR 97058	5	20	2-71	9	33	10-67	20	5	2-33	7	0	0-100	52	8	2-18	33	3	1-22	5	0	0-100	46	2	1-16	43	2	0-17
MOUNT HOOO MEOICAL CENTER GRESHAM OR 97030	8	38	9-70	2	0	3-91	32	6	1-23	.	.		75	7	2-14	31	0	0-23	8	0	0-93	35	6	1-19	30	3	0-28
MOUNTAIN VIEW HOSPITAL MADRAS OR 97741	4	25	0-78	3	67	5-86	1	0	2-98	.	.		11	9	0-53	1	0	0-100	1	0	0-100	5	0	0-75	15	7	0-52
NEW LINCOLN HOSPITAL TOLEDO OR 97391	.	.		.	.		.	.		.	.		2	0	0-97	.	.		.	.		.	.		1	0	0-100
NEWBERG COMMUNITY HOSPITAL NEWBERG OR 97132	1	100	1-97	2	50	2-90	9	0	1-50	.	.		33	3	2-22	8	0	0-55	3	0	0-99	47	4	1-16	21	0	0-34
NORTH LINCOLN HOSPITAL LINCOLN CITY OR 97367	6	0	2-67	2	0	1-89	10	0	2-48	.	.		38	8	1-18	4	25	0-75	4	0	0-100	17	12	1-33	26	0	0-34
OREGON HEALTH SERVICES UNI PORTLANO OR 97201	15	13	2-47	4	50	5-79	13	8	2-41	145	0	0-6	44	16	3-20	35	0	0-22	9	0	0-96	147	3	2-10	41	0	0-16
PACIFIC COMMUNITIES HOSPIT NEWPORT OR 97365	7	14	10-73	5	0	5-75	21	14	2-31	.	.		54	9	1-14	2	0	0-96	3	0	0-100	39	8	1-18	20	0	0-42
PENOLETON COMMUNITY HOSPIT PENOLETON OR 97801	.	.		.	.		.	.		8	0	0-100	2	50	0-92	.	.		1	0	0-100	.	.		.	.	
PIONEER MEMORIAL HOSPITAL HEPPNER OR 97836	.	.		.	.		.	.		.	.		4	0	0-83	3	0	0-96	.	.		2	0	0-98	.	.	
PIONEER MEMORIAL HOSPITAL PRINEVILLE OR 97754	4	25	1-76	3	67	5-86	9	0	1-50	.	.		26	8	0-24	3	0	0-92	2	0	0-100	14	0	0-38	3	33	0-99
PORTLANO AOVENTIST MEOICAL PORTLANO OR 97215	15	20	5-51	12	42	16-68	72	11	4-19	2	0	0-100	138	5	2-11	54	0	1-17	32	0	0-72	65	5	1-13	153	1	0-6
PROVIOENCE HOSPITAL MEOFORO OR 97504	9	0	5-62	14	29	18-67	30	10	2-25	4	0	0-99	134	3	2-10	91	2	1-13	14	0	0-99	89	2	2-12	185	3	0-5

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
PROVIDENCE MEDICAL CENTER PORTLAND OR 97213	OR-59	3162	10	8-15	275	17	14-29	103	24	20-38	81	11	10-30	129	21	15-30	92	45	30-51	54	13	11-36	180	16	12-26
PROVIDENCE MILWAUKIE HOSPI MILWAUKIE OR 97222	OR-60 *	570	14	9-17	50	28	12-37	20	25	14-53	18	22	7-46	40	33	12-39	24	46	20-57	17	6	4-43	48	21	10-34
ROGUE VALLEY MEDICAL CENTE MEDFORD OR 97504	OR-61 *	2066	10	8-14	160	34	19-37	53	23	15-39	43	12	8-33	88	24	14-33	85	28	25-46	24	25	10-46	94	20	12-30
SACRED HEART GENERAL HOSPI EUGENE OR 97440	OR-62	3410	10	8-14	236	19	15-31	131	29	19-35	48	25	12-38	138	20	15-30	134	30	27-45	55	22	12-37	199	16	13-27
SALEM HOSPITAL SALEM OR 97301	OR-63	3851	12	8-14	397	18	14-28	170	28	19-34	89	13	9-27	208	20	17-29	152	45	29-46	57	16	8-31	227	24	13-26
SANTIAM MEMORIAL HOSPITAL STAYTON OR 97383	OR-64 *	172	20	11-23	7	29	7-67	8	13	11-69	7	14	2-59	16	25	8-49	7	57	12-74	7	43	4-64	31	26	13-45
SEASIDE GENERAL HOSPITAL SEASIDE, OREGON 97138	OR-65 *	243	13	8-18	24	42	13-50	6	50	6-69	9	22	5-57	10	30	6-56	8	13	11-69	3	33	1-81	19	11	5-39
SILVERTON HOSPITAL SILVERTON OR 97381	OR-66 *	279	13	8-18	12	25	6-53	16	56	12-55	6	83	3-65	26	8	8-39	10	50	15-70	14	7	2-43	30	3	7-35
SOUTHERN COOS GENERAL HOSP BANDON OR 97411	OR-67	118	22	10-25	4	50	6-81	3	100	3-82	1	100	0-97	11	45	7-55	9	33	13-69	5	40	5-74	22	9	7-41
SOUTHERN OREGON MEDICAL CE GRANTS PASS OR (JOSPHINE CO) 97526	OR-68 *	686	13	8-16	60	17	9-32	24	38	14-49	32	25	8-37	43	16	12-38	18	44	17-60	18	50	9-50	65	17	10-31
ST ANTHONY HOSPITAL PENDLETON OR 97801	OR-69 *	537	10	8-16	49	22	12-37	21	19	12-49	15	7	5-45	21	33	8-42	21	19	19-59	10	10	2-51	41	12	10-36
ST CHARLES MEDICAL CENTER BEND OR 97701	OR-70	1461	10	7-13	117	23	16-35	47	32	14-40	36	14	7-34	53	32	12-35	40	23	21-51	11	0	5-53	90	18	10-27
ST ELIZABETH HOSPITAL & HE BAKER OR (BAKER COUNTY) 97814	OR-71 *	301	13	7-17	18	33	9-49	7	14	6-66	18	6	5-41	9	11	5-57	11	18	13-64	5	0	2-69	34	29	8-36
ST VINCENT HOSPITAL & MEDI PORTLAND OR 97225	OR-72	3076	8	7-13	263	17	15-30	78	27	17-37	75	8	7-26	122	21	15-30	110	28	28-48	51	14	9-34	149	15	12-26
ST. HELENS HOSPITAL & HEAL ST. HELENS OR 97051	OR-73 *	268	13	10-20	11	27	12-64	14	29	10-54	8	38	4-58	27	22	9-40	16	44	17-62	11	9	7-57	33	12	9-37
TILLAMOOK COUNTY GENERAL H TILLAMOOK OR 97141	OR-74	367	11	11-20	13	38	7-53	27	33	14-47	16	6	4-43	21	5	11-48	24	25	19-57	8	0	2-57	63	14	11-33
TUALITY COMMUNITY HOSPITAL HILLSBORO OR 97123	OR-75 *	812	13	9-16	55	36	16-42	31	45	15-46	23	13	5-38	47	21	12-36	38	45	25-56	15	0	4-45	55	22	11-33
UMPQUA VALLEY COMMUNITY HO MYRTLE CREEK OR 97457	OR-76 *	70	4	5-21	.	.		.	.		5	0	3-70	3	0	2-82	4	50	5-79	3	0	0-87	8	13	5-60
VA HOSP PORTLAND OR 97207	OR-77 *	1	0	0-100	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VALLEY COMMUNITY HOSPITAL DALLAS OR 97338	OR-78 *	379	8	8-16	25	16	9-44	16	19	15-59	12	8	5-51	18	11	7-44	9	33	16-74	12	8	4-49	19	5	8-45
WALLOWA MEMORIAL HOSPITAL ENTERPRISE OR 97828	OR-79 *	165	10	7-19	2	100	6-94	6	17	5-67	5	0	0-69	9	33	7-61	7	14	10-72	12	8	5-52	31	13	7-36
WESTERN LANE HOSPITAL DIST FLORENCE OR 97439	OR-80	262	15	9-19	21	43	8-45	6	33	6-69	5	40	3-70	11	36	10-61	19	47	21-64	6	0	2-64	27	15	7-37
WILLAMETTE FALLS COMMUNITY OREGON CITY OR 97045	OR-81 *	1035	14	9-16	81	20	13-35	35	26	16-46	32	22	9-38	53	30	14-37	44	52	26-56	20	15	8-46	71	21	11-31
WOODLAND PARK HOSPITAL PORTLAND OR 97220	OR-82 *	628	13	8-16	26	8	7-39	24	25	15-51	14	21	9-54	31	26	11-41	33	30	23-56	13	23	6-51	48	23	9-33

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Dphthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
PROVIDENCE MEDICAL CENTER PORTLAND DR 97213	38	18	13-49	29	28	23-60	114	4	5-17	12	0	0-99	256	7	4-10	162	2	1-11	31	0	0-75	274	6	3-8	251	1	1-5
PROVIDENCE MILWAUKIE HDSPI MILWAUKIE DR 97222	1	0	0-99	8	25	9-68	37	0	3-25	.	.		55	4	2-18	23	4	1-27	7	0	0-100	34	3	1-20	46	2	0-16
ROGUE VALLEY MEDICAL CENTE MEDFORD DR 97504	18	6	5-48	4	75	9-85	43	12	2-21	5	0	0-100	161	5	2-10	32	3	0-24	12	0	0-100	351	4	2-7	199	1	0-5
SACRED HEART GENERAL HDSPI EUGENE DR 97440	26	23	8-47	14	36	16-64	77	9	4-19	6	0	0-100	226	6	3-10	169	2	1-10	46	0	0-45	385	4	3-8	296	1	0-4
SALEM HOSPITAL SALEM DR 97301	35	14	7-41	19	53	17-60	132	8	4-15	47	0	0-53	393	6	3-8	156	3	1-11	31	0	0-58	276	5	2-8	381	1	0-4
SANTIAM MEMORIAL HOSPITAL STAYTON DR 97383	5	60	2-71	2	50	5-93	1	0	0-100	.	.		15	0	0-36	2	0	0-94	2	0	0-100	16	13	1-34	6	33	0-90
SEASIDE GENERAL HOSPITAL SEASIDE, OREGON 97138	3	0	4-85	6	17	9-75	2	50	0-99	.	.		24	4	1-26	11	0	0-45	2	0	0-100	34	6	1-19	7	0	0-92
SILVERTON HOSPITAL SILVERTON DR 97381	4	25	5-81	1	0	1-97	4	0	0-79	.	.		34	0	1-20	3	0	0-92	2	0	0-100	11	9	0-45	13	0	0-61
SOUTHERN COOS GENERAL HOSP BANDON DR 97411	3	67	6-88	.	.		1	0	0-100	.	.		17	6	1-34	4	0	1-74	.	.		7	29	0-62	5	0	0-97
SOUTHERN OREGON MEDICAL CE GRANTS PASS DR (JOSPHINE CO) 97526	3	67	2-82	6	17	8-74	21	14	1-29	2	0	0-100	67	1	2-14	27	4	0-27	2	0	0-100	52	6	1-15	31	0	0-25
ST ANTHONY HOSPITAL PENDLETON DR 97801	3	0	4-85	5	60	8-78	19	16	2-34	3	0	0-100	69	1	2-16	41	0	0-24	7	0	0-100	41	5	1-17	29	0	0-22
ST CHARLES MEDICAL CENTER BEND DR 97701	12	25	5-56	10	20	15-71	46	7	2-20	10	0	0-100	134	1	1-10	88	1	0-13	25	0	0-49	77	12	2-13	180	0	0-5
ST ELIZABETH HOSPITAL & HE BAKER DR (BAKER COUNTY) 97814	9	33	2-57	3	0	5-86	11	9	1-44	5	0	0-100	52	2	1-15	5	40	0-78	6	0	0-100	20	5	0-29	10	0	0-68
ST VINCENT HOSPITAL & MEDI PORTLAND DR 97225	16	31	11-58	16	38	16-62	84	5	3-17	20	0	0-76	248	2	3-9	104	4	1-12	31	0	0-75	558	4	3-7	246	2	0-5
ST. HELENS HOSPITAL & HEAL ST. HELENS DR 97051	3	0	0-83	5	40	8-78	13	0	1-40	1	0	0-100	21	10	0-29	9	0	0-52	2	0	0-100	33	0	1-19	8	0	0-98
TILLAMOOK COUNTY GENERAL H TILLAMOOK DR 97141	6	17	5-70	8	0	15-75	.	.		.	.		40	0	1-17	6	0	0-74	4	0	0-100	34	3	1-19	5	0	0-93
TUALITY COMMUNITY HOSPITAL HILLSBORO DR 97123	13	23	9-59	9	33	13-70	30	7	2-26	1	0	0-100	83	8	2-13	27	0	0-25	10	0	0-100	64	5	1-13	76	0	0-10
UMPQUA VALLEY COMMUNITY HO MYRTLE CREEK DR 97457	1	0	1-97	.	.		.	.		.	.		9	0	1-49	.	.		1	0	0-100	11	0	0-52	4	0	0-100
VA HOSP PORTLAND DR 97207	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
VALLEY COMMUNITY HOSPITAL DALLAS DR 97338	2	50	4-92	8	50	12-72	12	0	1-42	.	.		46	9	1-17	26	0	1-25	8	0	0-99	30	0	1-21	32	0	0-22
WALLOWA MEMORIAL HOSPITAL ENTERPRISE DR 97828	3	0	1-82	.	.		.	.		1	0	0-100	23	9	1-26	5	0	0-75	1	0	0-100	14	7	0-38	4	0	0-97
WESTERN LANE HOSPITAL DIST FLORENCE DR 97439	4	75	6-82	2	0	0-90	8	0	1-53	.	.		26	8	1-24	1	0	0-100	1	0	0-100	20	5	1-28	21	0	0-43
WILLAMETTE FALLS COMMUNITY OREGON CITY DR 97045	11	18	4-55	3	33	8-89	39	5	4-25	2	0	0-100	121	10	3-13	51	6	1-17	14	0	0-100	62	5	2-15	79	3	0-9
WOODLAND PARK HOSPITAL PORTLAND DR 97220	8	13	6-66	5	40	5-74	12	17	1-42	1	0	0-100	49	8	1-15	22	5	1-28	4	0	0-100	46	11	1-16	36	3	0-22

*Written Comments Not Submitted.

COMMENTS ON THE HCFA MORTALITY DATA
ALBANY GENERAL HOSPITAL, ALBANY, OREGON
MEDICARE PROVIDER #38-0022

A. Data Verification

1. Verification of detailed beneficiary death information revealed no material errors in the HCFA data. HCFA data indicates that a total of 82 Medicare patients admitted to Albany General Hospital died within 30 days of admission. Our records indicate that of the 82 listed deaths, 60 patients died while still a patient of the hospital and 22 died after discharge.

2. HCFA statistical data regarding total Medicare cases for 1986 can not be verified, because it excludes all but the last admission of beneficiaries admitted more than once to a hospital during the year. Without verification of total cases, hospitals can not validate the "Actual Mortality Rate" as listed by HCFA. Our records indicate that 1,250 Medicare admissions occurred in 1986.

B. Interpretative Remarks

Hospital studies evaluating the reason for death in the 82 cases listed by HCFA, report the following supplemental information.

1. In Hospital Deaths - 60

   a. "Do Not Resuscitate" orders were found on 85% of the 60 patients' records. Of the 60 patients, 50% of them had "Do Not Resuscitate" orders written prior to or at the time of admission. Death without extraordinary measures was either an expected outcome or the wish of the patient and/or family after hospital admission.

   b. The average age of these patients was in excess of 75 years.

2. Post Discharge Deaths - 22

   a. At the time of their last hospital admission, 50% of these cases had orders from the patient and family on their records not to take extraordinary measures to prolong life.

2. Post Discharge Deaths (Cont.)

   b. The average age of these patients was in excess of 79 years.

   c. Over 90% of these patients were discharged with a prognosis of terminal/poor.

   d. There was no information available to determine the cause of these deaths. Verification was completed using state death records.

C. General Comments and Concerns

Although Albany General Hospital is on the lower end of the HCFA predicted mortality rates in nearly all diagnostic categories, we feel it is important to comment on the following areas of concern.

1. These data are limited and to that extent misleading if used to measure quality. HCFA has acknowledged that until additional statistical measures dealing with complex issues such as severity of illness are available, these data should not be used to make judgements about the quality of care at a particular hospital and can not be used to compare hospitals.

2. These data are hospital specific. They can not be used to compare one hospital to another because the methodology selected correctly predicts different ranges for different mixes of patients. Patient mix varies from hospital to hospital.

3. The statistical model selected measures the relationship between a limited number of patient characteristics and the risk of death. The impact of patient characteristics not included in the study is a significant omission that limits the application of these data.

4. The inclusion of the 30 day post discharge deaths in the statistics may result in attributing deaths to hospitals that are unrelated to the reasons for their earlier hospitalization.

KAISER PERMANENTE

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington D.C. 20201

Re: Bess Kaiser Medical Center
Portland, Oregon

Dear Mr. Roper:

As a group, the 28 Kaiser Foundation Hospitals (KFH), located in four states, had 39 mortality rates which were below the tolerance ranges predicted by HCFA while only 4 rates were above these predicted ranges. HCFA reported up to 17 mortality rates for each hospital, and the range for each was intended to include 95% of all hospitals. Thus by chance alone, 12 of the KFH mortality rates would be expected to be higher than HCFA's predicted ranges, with another 12 lower than these ranges.

This favorable 39 to 4 ratio of mortality statistics for KFH hospitals needs little or no explanation. Nevertheless we are concerned by HCFA's use of risk models which cannot be critically evaluated at this time. Unaccountably, HCFA has not released sufficient data for an objective outside review of their method (e.g., no coefficients of variables in the models, no expected death rates). Despite this limitation, our preliminary review of the mortality risk adjustment models for 1986 Medicare discharges indicates serious problems which greatly reduce their value as useful measures of hospital care. One of the most apparent problems is due to the fact that nearly all the 16 disease categories contain principal diagnoses which differ greatly in their mortality rates. The 8 chronic comorbidities used as the key risk adjustors are not adequate to overcome these large differences. For this reason, hospitals can vary considerably in their risks, even after applying the models' adjustments. Some illustrations of omitted risk factors follow.

CA - Cancer care cannot be judged from a single hospital episode, particularly when there are no risk factors to measure either the stage of the disease or whether the case was admitted for scheduled surgery. Admission for terminal care is certainly a key risk factor for cancer deaths, and this in turn depends on the availability of alternate sources of such care, for example hospice and home care programs. While admissions to HCFA-certified hospices were excluded from the 1986 discharge data, we believe that admissions to hospice units in short-term hospitals which had not sought HCFA approval were generally included, even when no charge for this care was made to HCFA. This would lead to inclusion of hospice cases at some hospitals and not at others.

GI - Gastrointestinal disease includes the principal diagnosis of inguinal hernia (code 550). Most cases with this diagnosis are admitted for scheduled hernia repair surgery, which is very low in risk. However, some hernia cases are emergency admissions which are much higher in risk (e.g., strangulated hernias).

HS - Severe acute heart disease is likely to be dominated by acute myocardial infarction, which is generally much lower in risk than other cases in this category (e.g., ruptured aortic aneurysm, cardiac arrest).

TR - Severe trauma risk depends largely on the type, extent and combinations of injuries, none of which is distinguished by the risk model.

The Kaiser Permanente Medical Care Program has a long record of interest and involvement in the development of use of methods to adequately risk adjust outcomes of hospital care for patients with diverse risks at admission. This year's HCFA analysis has incorporated many improvements which we suggested in our published critique of the HCFA outliers data released last year. We will continue to cooperate with HCFA and other responsible agencies in efforts to further improve these methods to make the findings more useful.

Sincerely,

Theodore M Carpenter Jr.

Theodore M. Carpenter, Jr.
Vice President and Associate Regional Manager

COLUMBIA MEMORIAL HOSPITAL

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Dear Sirs:

After reviewing the patients who expired at our facility, 45 were over the age 70. Of these patients, all but one had either a chronic disease and or a terminal disease. This was not necessarily the reason for admission.

If this study is based on the principle diagnosis, then the entire picture isn't seen. If a patient is admitted because of a hip fracture, but goes into cardiac arrest and expires, this is a secondary code, not the principle.

Our mortality rate for 1986 was 2.47% including stillbirths, with the majority being Medical Service Medicare patients.

Sincerely,

Susan D. Sealy

Susan D. Sealy, ART
Director, Medical Records

2111 Exchange St. • Astoria, Oregon 97103 • (503) 325-4321

healthlink

EMANUEL HOSPITAL
& HEALTH CENTER

2801 N. Gantenbein Avenue
Portland, Oregon 97227
503 280-5200

October, 16 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

The data used by HCFA indicate that a total of 187 Medicare patients admitted to Emanuel Hospital died, 58 of which expired within 30 days of admission. Upon review of the data, we show that 1 case was counted twice (please see attached list for corrections), and 9 cases had inaccurate dates, some involving admission and discharge dates. Although you show a total of 1507 Medicare admissions for our facility, our records indicate 3133 admissions for the year 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries. Upon review of those cases shown as dying within 30 day of hospitalization, we found that 94% of the cases were discharged to a nursing home or hospice setting.

We would like to make clear that mortality rates should not serve as the basis for measuring the quality of care provided by the hospitals or physicians. The measurement of quality requires taking into account other indicators such as appropriateness of care and overall patient outcome. In computing mortality rates, HCFA considered a small number of factors such as age, sex, previous hospitalizations and the existence of comorbidities. However, factors such as the stage of the patient's disease, the socio-economic differences in the patient population, and, most important, the severity of each patient's illness, were not considered.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

A Lutheran Affiliated Center of Caring & Excellence

Because of the methodology utilized by HCFA in determining mortality rates, it is impossible for us to verify the data completely; however, all deaths occurring at our facility are reviewed individually through our medical staff quality assurance program and will continue to be reviewed along with other indicators of care in the future.

Sincerely,

Fred R. Eaton
Administrator
(503) 280-4008

BW:jb
Attachment

healthlink

HOLLADAY PARK
MEDICAL CENTER
1225 Northeast Second Avenue
Portland, Oregon 97232
(503) 233-4567

October 15, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

Enclosed please find corrections to the HCFA mortality data for Holladay Park Medical Center.

Also enclosed are our comments on the data.

Sincerely,

Jane Cummins

Jane Cummins
Administrator

JC/ca

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

COMMENTS ON THE HCFA MORTALITY DATA
HOLLADAY PARK MEDICAL CENTER
PORTLAND, OREGON

VERIFICATION OF DATA

A listing of the inaccuracies identified in the HCFA data for Holladay Park Medical Center is attached.

COMMENT

It is noted with appreciation that HCFA acknowledges the imperfection of mortality rate statistics as a measure of a hospital's quality of care. Among other factors, differences in severity of illness, patient economic status, availability and quality of pre and post-hospitalization medical care, and the stage of a disease process at the time of admission, may affect patient outcome. However, deaths can be used as one topic for study of potential enhancements of quality patient care, and they have long been so used by this facility routinely, as well as by hundreds of institutions nationwide.

The current methodology for computing the data is improved from previous attempts. The HCFA statistics list 943 Medicare cases for Holladay Park Medical Center in 1986. Our statistics show 1,755 Medicare admissions which would result in an overall death rate of 4.8%. It is recognized that some of this difference may reflect multiple admissions, but it should also be recognized that a somewhat higher death rate is produced by the HCFA methodology. It should also be noted that small sample sizes may not produce meaningful comparisons.

Finally, it is critical that any publication of the data and any comparisons between hospitals, if made at all, just include the publication of the projected ranges, which are adjusted for the patient mix of different hospitals.

JC/ca

KAISER PERMANENTE

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington D.C. 20201

Re: Kaiser Sunnyside Medical Center
Clackamas, Oregon

Dear Mr. Roper:

As a group, the 28 Kaiser Foundation Hospitals (KFH), located in four states, had 39 mortality rates which were below the tolerance ranges predicted by HCFA while only 4 rates were above these predicted ranges. HCFA reported up to 17 mortality rates for each hospital, and the range for each was intended to include 95% of all hospitals. Thus by chance alone, 12 of the KFH mortality rates would be expected to be higher than HCFA's predicted ranges, with another 12 lower than these ranges.

This favorable 39 to 4 ratio of mortality statistics for KFH hospitals needs little or no explanation. Nevertheless we are concerned by HCFA's use of risk models which cannot be critically evaluated at this time. Unaccountably, HCFA has not released sufficient data for an objective outside review of their method (e.g., no coefficients of variables in the models, no expected death rates). Despite this limitation, our preliminary review of the mortality risk adjustment models for 1986 Medicare discharges indicates serious problems which greatly reduce their value as useful measures of hospital care. One of the most apparent problems is due to the fact that nearly all the 16 disease categories contain principal diagnoses which differ greatly in their mortality rates. The 8 chronic comorbidities used as the key risk adjustors are not adequate to overcome these large differences. For this reason, hospitals can vary considerably in their risks, even after applying the models' adjustments. Some illustrations of omitted risk factors follow.

CA - Cancer care cannot be judged from a single hospital episode, particularly when there are no risk factors to measure either the stage of the disease or whether the case was admitted for scheduled surgery. Admission for terminal care is certainly a key risk factor for cancer deaths, and this in turn depends on the availability of alternate sources of such care, for example hospice and home care programs. While admissions to HCFA-certified hospices were excluded from the 1986 discharge data, we believe that admissions to hospice units in short-term hospitals which had not sought HCFA approval were generally included, even when no charge for this care was made to HCFA. This would lead to inclusion of hospice cases at some hospitals and not at others.

Kaiser Foundation Hospitals
Edgar F. Kaiser Health Center, 3600 North Interstate Avenue, Portland, Oregon 97227-1191 (503) 280-2050

GI - Gastrointestinal disease includes the principal diagnosis of inguinal hernia (code 550). Most cases with this diagnosis are admitted for scheduled hernia repair surgery, which is very low in risk. However, some hernia cases are emergency admissions which are much higher in risk (e.g., strangulated hernias).

HS - Severe acute heart disease is likely to be dominated by acute myocardial infarction, which is generally much lower in risk than other cases in this category (e.g., ruptured aortic aneurysm, cardiac arrest).

TR - Severe trauma risk depends largely on the type, extent and combinations of injuries, none of which is distinguished by the risk model.

The Kaiser Permanente Medical Care Program has a long record of interest and involvement in the development of use of methods to adequately risk adjust outcomes of hospital care for patients with diverse risks at admission. This year's HCFA analysis has incorporated many improvements which we suggested in our published critique of the HCFA outliers data released last year. We will continue to cooperate with HCFA and other responsible agencies in efforts to further improve these methods to make the findings more useful.

Sincerely,

Theodore M Carpenter Jr.

Theodore M. Carpenter, Jr.
Vice President and Associate Regional Manager

LEBANON COMMUNITY HOSPITAL

525 North Santiam Highway • P.O. Box 739 • Lebanon, Oregon 97335-0739
Phone (503) 258-2101 or (503) 367-2616

October 14, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration

Provider #380008

Dear Dr. Roper:

Thank you for making available to us the data for the Medicare mortality reports which you plan to publish. There are several differences between your data and our records which I would call to your attention.

Two patients were admitted to the hospital following the hospitalizations which you reported and died in the hospital. In two instances the date of death which you show is different from that indicated in our records. In one case [redacted] the date of death according to our records is more than thirty days after discharge so this patient should be removed from this listing.

We have no record of ever providing hospital care for two patients listed [redacted] I further note that in each case the other data on that line is identical to the line above. It appears that there is a computor error here.

I have enclosed a copy of the data sheets with the dates on our records written in and the three names which should not be listed underlined. I thank you for correcting this information pertaining to our hospital.

Sincerely,
LEBANON COMMUNITY HOSPITAL

Gene Kanagy
Administrator

GK:cm

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

LOWER UMPQUA HOSPITAL

600 Ranch Road
Reedsport, Oregon 97467
Phone (503) 271-2171

September 30, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Reference: Lower Umpqua Hospital Mortality Information
Medicare Provider No. 38-0065

Gentlemen:

The information which was provided to Lower Umpqua Hospital contained five inaccuracies out of twenty-five regarding the dates.

In addition, many of the deaths occurred following discharge from the hospital by as much as two weeks leaving open to question whether the death was hospital associated.

Of the twenty-five deaths indicated, there were nine females with a mean age of 76.66 years of age and sixteen males with a mean average of 75.75 years of age. The expected death rate for the females is 4.89% and for the males is 7.21%. This information when applied to the mortality tables provided by HCFA would indicate that hospitals are doing very well in terms of quality.

In addition, the table only measures the Medicare population and does not consider the hospital as a whole and therefore is skewed in terms of a true statistical measurement.

In reading the information which was provided, we find no stated purpose for the release of this information and question the intent of HCFA.

Very truly yours,

Richard R. Bell

Richard R. Bell,
Executive Director

RRB/jp
cc: Oregon Association of Hospitals

MERIDIAN PARK HOSPITAL
19300 S.W. 65th Avenue
Tualatin, Oregon 97062
(503) 692-1212

October 1987

William Roper, M.D.
Administrator
Health Care Financing Administration

Re: 1986 Mortality Data Hospital #: 380089

In reference to the 1986 Medicare Mortality Data provided to our hospital on September 21, 1987, the following comments are offered for inclusion in the December 1987 public release:

Mortality rates, regardless of the methodology for computing the rate, should not serve as a basis for measuring the quality of care provided by hospitals or physicians nor should mortality rates be used to compare the quality provided by different hospitals or physicians. The measurement of health care quality requires a broader approach, taking into account the process, appropriateness and outcome of patient care services and the characteristics of the patient population. Given that mortality information may be one of the only assessment tools available to the government at this time, analysis of the 1986 mortality rates as computed by the HCFA is meaningless as the statistical model for deriving the rates does not take into account the severity of each patient's illness, the socio-economic differences in the patient population, or the stage of the patient's disease at the time of the hospitalization. Each of these factors contribute significantly to the expected mortality rate. Without inclusion of these factors in the analysis the health care community cannot attach any significance to the figures as presented by HCFA in September 1987.

Admittedly HCFA attempted to include some patient-specific modifiers in their calculations of predicted mortality rates for each hospital. First, it is questioned if these modifiers - age, sex, admitting diagnosis, previous hospitalizations and/or transfers, and the existence of selected comorbidities - actually provide a true picture of our patient population for purposes of predicting mortality rates. Second, it is strongly recommended that analysis or republication of hospital-specific data should not be done without the benefit of the predicted mortality rates.

Meridian Park Hospital, like many hospitals in the United States, annually admits only a small number of Medicare patients. It is recommended that future data releases include at least two years of data. In four of the sixteen diagnostic categories, Meridian Park Hospital treated less than 10 Medicare patients. The health care community and consumers cannot be expected to analyze outcome statistics which include such small numbers.

As a part of our comprehensive medical staff quality review program, each in-hospital expiration is extensively evaluated. Each of the cases of inpatient mortality have been reviewed by a group of physicians to evaluate the quality of care provided. The identification of patients who expired

after discharge is data not previously provided to hospitals. It is recommended that HCFA continue to provide hospitals with the names of Medicare beneficiaries who expired within 30 days of hospital discharge so that these cases may be included in our peer review activities.

Endogenous to the methodology for classifying patient diagnoses is the problem related to the choice of principal diagnosis for each hospitalization. Because the ICD-9-CM coding principles require that we code as the principal diagnosis that condition which caused the patient's hospitalization, the diagnostic category into which the patient is assigned does not necessarily reflect the true cause of the patient's mortality. For example, seven of the 158 reported deaths for Meridian Park Hospital were patients with advanced malignancies but the coding requirements caused them to be placed in a non-cancer category because their reason for admission was another medical condition. The actual cause of the patient's mortality was a combination of many diseases and conditions not necessarily the specific reason for hospital admission. Meridian Park Hospital is located in a region with a high Medicare population and most of our Medicare patients are admitted to the hospital with more than one significant medical problem. Statistical data on inpatient mortality rates cannot adequately reflect the clinical condition of the patient. In order to analyze the quality of care provided to these patients, individual case review by physician peers is required.

The mortality rate for patients who expired after discharge from the hospital cannot be analyzed in relation to any specific health care provider. Patients may or may not have expired from conditions treated in the hospital. Due to the 30-day deadline required for response to the 1986 Medicare Mortality Data release, we cannot investigate the cause of death for all of the 62 patients who expired after hospital discharge. On preliminary review, it was determined that 35 of the patients who expired after leaving the hospital were discharged to home. In these instances no health care provider is maintaining constant supervision of the patient and a variety of events unrelated to the provision of health care services may have occurred. In many instances these were patients in terminal stages of their disease and a discharge to home was the plan of care chosen by the patient or the family.

It is impossible for mortality statistics alone to provide a measure of the quality of care provided by individual institutions. The assessment of quality must be made on a case-by-case basis taking into account the needs of the individual patient, the patient's severity of illness and stage of disease and the plan of care which was chosen by the patient and the family.

Sincerely,

Carleton Lindgren
Administrator

merle west medical center

david r. arnold, chief executive officer

2865 daggett street, klamath falls, oregon 97601 503/882-6311

October 25, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
200 Independence Ave, S.W.
Room 314 - G
Washington, DC 20201

RE: Medicare Mortality Data Release

Dear Doctor Roper:

Enclosed please find our hospital's comment regarding the Medicare Mortality Data. We wish to have our comments published with the statistical data due to be published in December of 1987.

Sincerely,

David R. Arnold,
Chief Executive Officer

James F. Novak, M.D.
Chairman Medicine Committee

Charles A. Bailey
Chairman, Board of Directors

merle west medical center

david r. arnold, chief executive officer

2865 daggett street, klamath falls, oregon 97601 503/882-6311

MERLE WEST MEDICAL CENTER

Response to the Medicare Mortality Data Release:

It is our mission at Merle West Medical Center to provide quality patient care. To measure how we are doing, each department/service performs peer review to evaluate care that was given by that particular department or service. At Merle West Medical Center we have a hospital-wide quality assurance program for the continuous monitoring and evaluation of patient care performed by peers. The purpose of this review is to identify the presence or absence of quality concerns and take corrective action when necessary. The governing board, management, and the medical staff are committed to the best patient care possible.

Not only does the hospital use mortality cases for study, but many other paramenters or criteria are used to trigger quality of care review. Any indication of potential quality care concerns, including a mortality rate that is higher or lower than predicted, leads to a prompt investigation. Our hospital has, in fact, reviewed the cases of the medicare mortality data release in the category of severe chronic heart disease. Severe chronic heart disease includes rheumatic heart failure; hypertensive heart disease with congestive heart failure; cardiomyopathies; congestive heart failure; and acute edema of the lung. It, of course, does not include chest pain or heart attacks. The following is the result of the review of the category of chronic heart disease.

At Merle West Medical Center chronic heart disease was at the upper end of the predicted mortality rate of medicare patients for 1986. After verification, it was determined that one case was entered twice by HCFA and the total reviewed was then reduced by one.

merle west medical center

david r. arnold, chief executive officer

2865 daggett street, klamath falls, oregon 97601 503/882-6311

The average age of these patients was 77 years old. Of the nineteen patients who died in the diagnostic category of chronic heart disease, sixteen cases or 84% of the deaths were anticipated. This means that death was the expected outcome of the advanced state of the patient's disease process or condition and the patients and/or families requested no resuscitation be performed and that they be allowed to die with dignity. Since this data included deaths 30 days after the last admission to the hospital, eight cases or 42% of the patients died outside of the hospital. Six of these eight patients died in a nursing home, and two were able to remain at home until the final days of their illness. These patients with congestive heart failure had multiple organ systems failure and/or end stage diseases including kidney disease, terminal cancer of the prostate, terminal cancer of the breast, chronic lung disease, or long histories of cardiac disease.

The mortality rates HCFA has calculated are not necessarily a valid judgement of the quality of care. Other vital information is necesary to deal with complex issues such as severity of illness. It was the determination of the peer review conducted in 1986, and now again in 1987, that these patients received appropriate care.

accredited • joint commission on accreditation of hospitals

member • health future, inc. a consortium of independent oregon hospitals

MERLE WEST MEDICAL CENTER

2865 Daggett Street Klamath Falls, OR 97601

Data Verification

The data used by HCFA indicate that a total of 134 Medicare patients admitted to _____ hospital died within 30 days of admission. Of these, 100 died while still a patient of the hospital, while 34 died after discharge. Our own records indicate that 2431 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at _____ hospital is correct. Our own records also indicate that of the 128 Medicare patients who died within 30 days of admission while still an inpatient, 2303 were still alive at the time of discharge. [NOTE: the hospital should submit to HCFA a corrected copy of the patient listing clearly identifying any patients mistakenly coded as dead at the time of discharge.] It is impossible to determine the percentage of the _____ patients dying after discarge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In 1 of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. After correcting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to _____. Several factors may account for this difference.

Unique Services Resulting in Higher than Average Mortality.

Results of Prelimary Medicare Record Review.

healthlink
MOUNT HOOD MEDICAL CENTER
24800 S.E. Stark • P.O. Box 718 • Gresham, OR 97030-0154
Phone 503/667-1122

October 22, 1987

William L. Roper, MD, Administrator
Health Care Financing Administration
Department of Health and Human Services

Dear Dr. Roper:

I agree with your observation that the use of mortality statistics can be a helpful adjunct in any quality assurance program and that the public has a legitimate interest in obtaining useful and reliable information concerning the quality of care that is provided to them by community hospitals. I think you would also agree that mortality data, by itself, does not truly measure quality. However, if this information is appropriately used in concert with other quality assurance mechanisms, it can serve as a guide or focus in conducting peer review.

Mount Hood Medical Center has in place an active quality assurance program that includes ongoing clinical screens, including mortality statistics, that prompt further review and evaluation to ensure that the care provided meets the community standard and needs of patients. For example, physicians on our staff review each hospital related death to determine if any corrective follow-up action is necessary.

DATA VERIFICATION

The Department of Health & Human Services in preparing their Mortality Statistics has identified only the last hospital admission of the year for all Medicare beneficiaries and has calculated Mortality Rate based on this admission. Our records show that this includes only 58% of the total Medicare discharges from our hospital.

We have no way of verifying whether the number of Medicare patients treated at the hospital is correct. Our hospital reported 1,088 Medicare discharges for 1986. HCFA Mortality Rate was based on 632 discharges.

A definition of Hospital Death Rate as published by the American Medical Record Association developed through an investigation supported by PHS Research Grant from the National Center for Health Services Research and Development is the "proportion of inpatient hospitalizations that end in death, usually expressed as a percentage."

Our calculated death rate for Medicare discharges for 1986 would therefore be 10% including those deaths identified by HCFA following discharge as compared to an overall death rate of 14% as noted by HCFA.

INTERPRETIVE REMARKS

Severe Acute Heart Disease

The category of Severe Acute Heart Disease, a 52% mortality rate was noted in 33 patients. It was noted that 6 of the 17 expired patients

were admitted post cardiorespiratory arrest outside the hospital and came to our Emergency Department with anoxic brain damage; a diagnostic category with a higher than average risk of death. It is also questionable whether these patients should be categorized as Severe Acute Heart Disease, as they expired before diagnosis could be ascertained. One medical record noted that the patient arrested following aspiration. Cardiac arrest could be the terminal event in a variety of chronic terminal illnesses and is inappropriately categorized as Severe Acute Heart Disease.

With exclusion of these patients, the mortality rate for Severe Acute Heart Disease, mainly acute myocardial infarction is therefore calculated as a 35% mortality rate rather than 52%. Of the 8 patients identified as having myocardial infarctions, 50% of these patients also had cardiogenic shock, again another category which has a high predicted mortality rate.

If one would calculate the mortality rate per discharged patient, our mortality rate for myocardial infarctions at Mount Hood Medical Center would be 30%.

It is unclear as to why the ruptured abdmonial aneurysm was included as a Severe Acute Heart Disease. Expiration followed repair within 30 days and cannot clearly be attributed to the aneurysm.

Stroke (High Risk)

Of the 11 Stroke cases, 5 (45%) expired following discharge on an average of 5 days post discharge. 82% of the patients were brought to the hospital via ambulance following stroke with death the expected outcome at the time of admission. As a result of the patients and/or family wishes, no extraordinary efforts were to be carried out, i.e., do not resuscitate orders were written on all patients.

CONCLUSION

The use and comparison of mortality statistics can, at best, suggest to the hospital and its medical staff areas for review to determine if a quality problem does exist or if the patients treated were simply unusually complex or had other characteristics not recognized by the HCFA model that would lead to an above average mortality rate.

Peer review and quality assurance activities are important ongoing functions of this hospital and clearly embraced by the governing board, management and physicians.

Sincerely,

Mark W. Folger
Administrator
Medicare Provider #380025

THE OREGON
HEALTH SCIENCES UNIVERSITY
3181 S.W. Sam Jackson Park Road, L101, Portland, Oregon 97201 (503) 279-8204
Office of the Hospital Director

Medicare Provider No. 380009

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
Hubert H. Humphrey Building, 309-G
200 Independence S.W.
Washington, D.C. 20201

Dear Dr. Roper:

Although the concept of reporting mortality data to the public may have some merit, we suggest that if the data is reported, it must be in a format that is more useful to the public. Our recommendations, if adopted, could make the report clearer, less likely to be misunderstood or misused and therefore more valuable as public information. Our comments are separated into two categories; those of a general nature, and those more technical.

In general, the diagnostic category designations, perhaps informative to a health professional, would be unsuitable and perhaps confusing to those not in the medical professions. For example, what is a "gastrointestinal catastrophe"? How does it differ from an instance of "gastrointestinal disease"? Is a "cerebrovascular accident" a stroke, or bad bump on the head? What is an "electrolyte disturbance"? These category designations presume an understanding of medical terms and technical diagnoses which the individual consumer is unlikely to possess . We would recommend that other designations be used so that the consumer would better understand the nature of the causes which fall within the categories.

One of the stated purposes of the reporting of the mortality data is to provide the public with an indicator of quality of care for Medicare patients. We are concerned that the public receive all the information necessary to accomplish this intention, not just part of the information. But the format of the report makes it possible for incomplete dissemination of this information to occur. Since cases, actual mortality rate, and predicted mortality rate are separately listed, there is no guarantee that these three data elements, which must be considered together to provide an approximate

picture of an institution's mortality rate, will always be publicly disseminated together. For example, a hospital could have what appeared to be a very high mortality rate in one category, yet this rate could be well within the predicted range of mortality rates. On the other hand, a hospital could have what appeared to be a very low mortality rate within a category, though this rate might exceed the predicted rate. The possible reporting of one data element, separate from the others, could give the public a sadly misleading view of the mortality rates at a particular institution. Rather than reporting cases, mortality rate, and predicted mortality rate as separate elements, we suggest that each category only indicate the number of cases, and whether the mortality rate is under, within, or exceeds predicted values. This would eliminate the possibility that incomplete or misleading information will be published, and would still give consumers the information which you state this data is intended to provide.

Finally, a technical comment. The report is also confusing because the cases listed in the diagnostic categories do not add up to "all cases". In our report, the individual categories include only slightly more than half of all cases, leaving almost half the cases unaccounted for. Presumably these are cases which do not fall into one of the individual categories. We recommend including an explanation that many cases do not fall within a diagnostic category, and for this reason the sum of the category totals may not equal the grand total.

Sincerely yours,

Timothy M. Goldfarb
Interim Hospital Director
University Hospital

TMG:plc
8699D

PORTLAND
ADVENTIST
MEDICAL
CENTER
10123 SE
MARKET STREET
PORTLAND OREGON
97216
(503) 257-2500

October 26, 1987

William L. Roper, M.D., Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D. C. 20201

RE: 1987 HCFA MORTALITY RATE REPORT FOR PORTLAND ADVENTIST MEDICAL CENTER
MEDICARE PROVIDER NUMBER: 380060

Portland Adventist Medical Center appreciates the opportunity to provide a written response in advance of the publication of the Mortality Rate Report by the Health Care Financing Administration. Providing the members of our community with quality health care is not only a commitment that Portland Adventist Medical Center has incorporated into its statement of mission, but is of utmost concern to the hospital's governing board, management and medical staff. We believe improved measures of quality are needed, and support the American Hospital Association and Joint Commission on Accreditation of Hospitals in their efforts to identify appropriate methods for evaluating hospital quality.

The mortality rates published by HCFA are helpful and can be utilized to guide and focus our hospital's peer review process; however, it must be emphasized that the mortality rates themselves cannot be interpreted as a measure of quality. Indeed quality can only be evaluated through a process of peer scrutiny rather than simply through statistical comparisons. Unfortunately, raw mortality rates are often misused and misinterpreted thereby causing confusion and apprehension among Medicare beneficiaries and the public in general.

PAMC utilizes a series of internal quality review monitors which provide an ongoing assessment of the quality of care at our hospital Our ongoing monitoring and tracking of quality assurance indicators keep us well aware of a variety of indicators and help identify ways in which we can refine and improve our service to patients. Consequently, the statistics provided in the present report hold no surprises for us. As the report indicates, the actual mortality rates for each of PAMC's diagnostic categories fall within the range of predicted mortality rates. The only exception being two categories where no deaths were recorded. Since the total number of cases was relatively small in these categories, a single death within either would have placed our actual mortality rate well within the range predicted.

Though we at PAMC are pleased to fall consistently within the statistically predicted appropriate ranges for our institution, we caution interpreters of the statistics to recognize that this study is only one type of data array and cannot be used as a direct measure or indicator of quality medical care. Most importantly it must be realized that both the mortality rate and the predicted mortality ranges are integral parts of the statistical design and quoting only the mortality rate percentage would be a gross error. In other words since specific death rates are not adjusted for severity of illness, and the predicted mortality ranges are hospital-specific, any comparison between hospitals would be inaccurate and misleading.

We appreciate the HCFA's mortality information. Such data is a useful tool, and along with the other indicators tracked through our internal quality assurance process will serve to guide the hospital and its medical staff in their ongoing efforts to monitor quality and identify areas of concern that could warrant modifications in the care we provide. At the risk of appearing redundant, our caution to casual interpreters of this data is simply to reiterate the HCFA's statement, "that the information on its own is not a complete measure of the quality of care of the individual hospital...until we have developed additional statistical measures to deal with complex issues such as severity of illness, we cannot and do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital, or to make comparisons among hospitals."

Any questions about our section of the HCFA report or the above information may be directed to Larry D. Dodds, president, Portland Adventist Medical Center, 10123 S. E. Market Street, Portland, OR 97216. Telephone: 503/251-6150.

Sincerely,

Larry D. Dodds
President

D Schafer

Donald W. E. Schafer, M.D.
President, Medical Staff

5608

Portland Adventist Medical Center has carefully compared HCFA's mortality data with the hospital's own records and has noted a need for the following corrections in HCFA figures:

1. listed as code 427.5 should be code 436. Add to category CE and delete from category HS.

2. listed as code 038.40 should be code 572.8. Add to category GI and delete from category SE.

3. listed as code 079.9 should be code 410.0. Add to category HS and delete from category UN.

HOSPITAL = 380060 PORTLAND ADVENTIST MEDICAL CENTER PORTLAND, OR

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	1,528	11%	8 to 15%
CA - CANCER	140	16%	13 to 30%
CE - CEREBROVASCULAR ACCIDENTS	~~55~~ 56	~~22%~~ 23%	19 to 44%
EY - OPHTHALMOLOGIC DISEASE	2	0%	0 to 100%
GC - GASTROINTESTINAL CATASTROPHES	36	17%	5 to 31%
GI - GASTROINTESTINAL DISEASE	~~138~~ 139	~~5%~~ 6%	2 to 11%
GU - UROLOGIC DISEASE	54	0%	1 to 17%
GY - GYNECOLOGIC DISEASE	32	0%	0 to 72%
HL - LOW-RISK HEART DISEASE	65	5%	1 to 13%
HM - SEVERE CHRONIC HEART DISEASE	61	16%	13 to 34%
HS - SEVERE ACUTE HEART DISEASE	63	49%	26 to 51%
ME - METABOLIC/ELECTROLYTE DISTURBANCES	19	0%	4 to 40%
OP - ORTHOPEDIC DISORDERS	153	1%	0 to 6%
PN - PULMONARY DISEASE	109	24%	13 to 30%
RN - RENAL DISEASE	15	20%	5 to 51%
SE - SEPSIS	~~12~~ 11	~~42%~~ 36%	16 to 68%
TR - SEVERE TRAUMA	72	11%	4 to 19%

5609

PROVIDENCE MEDICAL CENTER
4805 NORTHEAST GLISAN STREET
PORTLAND, OREGON 97213-2967
PHONE: (503) 230-1111

SISTERS OF PROVIDENCE
SERVING IN THE WEST SINCE 1856

October 27, 1987

Medicare Provider Number 380061

William L. Roper, M.D., Administrator
Room 314-G Hubert H. Humphrey Building
200 Independence Avenue SW
Washington, D. C. 20201

Dear Dr. Roper:

SUBJECT: RESPONSE TO HCFA MORTALITY DATA REPORT

Providence Medical Center places a high value and priority on providing quality care. It has a multi-faceted program for quality assurance which pervades the organization and affects every department and service in which patient care is delivered. Providence's quality assurance system received praise from surveyors of the Joint Commission and received a full three-year accreditation.

In spite of the rather favorable position of Providence Medical Center in the subject HCFA report, we feel that mortality rates alone are not a good measure of overall quality of care. For example, the mortality data presented here do not take into account the severity of illness of patients. Further, it is important to determine whether the cause of death is related to the original purpose of hospitalization and the degree to which death might have been the expected outcome.

With this in mind, Providence includes mortality statistics as only one part of its overall quality assurance program. Every death is reviewed through the quality assurance system by physicians to determine whether problems in care contributed to the outcome and whether opportunities to improve care can be identified.

The HCFA report on inpatient mortality for 1986 at Providence was reviewed and evaluated by physicians and staff.

SISTERS OF PROVIDENCE INSTITUTIONS – ALASKA: PROVIDENCE HOSPITAL, ANCHORAGE – OUR LADY OF COMPASSION CARE CENTER, ANCHORAGE – **WASHINGTON:** PROVIDENCE HOSPITAL, EVERETT – PROVIDENCE MEDICAL CENTER, SEATTLE – THE DePAUL RETIREMENT RESIDENCE AND MOUNT ST. VINCENT NURSING CENTER, SEATTLE – ST. ELIZABETH MEDICAL CENTER, YAKIMA – ST. PETER HOSPITAL, OLYMPIA – ST. JOSEPH HOSPITAL, ABERDEEN – ST. HELEN HOSPITAL, CHEHALIS – **OREGON:** PROVIDENCE CHILD CENTER, PORTLAND – PROVIDENCE MEDICAL CENTER, PORTLAND – ST. VINCENT HOSPITAL AND MEDICAL CENTER, PORTLAND – SEASIDE GENERAL HOSPITAL, SEASIDE – PROVIDENCE HOSPITAL, MEDFORD – **CALIFORNIA:** PROVIDENCE HOSPITAL, OAKLAND – PROVIDENCE HIGH SCHOOL, BURBANK – SAINT JOSEPH MEDICAL CENTER, BURBANK.

An analysis of the case records shows the following:

- The average age of the patients who died as inpatients was 75.0.
- 69% of the patients who died in the hospital were admitted with a documented order, "DNR - Do Not Resuscitate" code.
- 47% were admitted as terminal patients.
- 0% of the patients were admitted as a planned or elective admission, in relatively good health.
- 4% of the patients were transferred to Providence from other health care facilities.
- 5% of the patients were transferred to Hospice.
- Two of the patients listed did not die as reported in the hospital.

In addition, Providence hired an independent research firm to study in detail deaths reported after discharge. This study concluded that of the 69 cases who died at home or in a nursing home, 42.9% of those discharged to nursing homes and 29.6% of those discharged to home died of causes unrelated to their hospitalization. The average age of patients who died after discharge was 79 years.

A substantial number of patients were discharged with terminal illnesses. In all cases, a plan for follow up care was developed in consultation with the patient and family. Providence has in place a system to provide care and support for all patients, including Providence's Medicare certified home health agency and a Medicare certified hospice program.

Providence treats many high risk patients, such as those with cancer, heart and lung disease. The resources available to help those patients face terminal illness include Hospice, Pastoral Care, Social Work, Bereavement Counseling and other programs.

As a Sisters of Providence hospital, every effort is made to cure and heal the patient, but when medical treatment is no longer effective, Providence offers the comfort, support and strength to assist the patient and family prepare for death.

Our concern with the HCFA report is that it would unintentionally create an expectation that death can somehow be avoided or be managed through medical interventions.

Very truly yours,

John Lee

John Lee
Administrator

/rw

cc: Harvey Brooks

SACRED HEART GENERAL HOSPITAL
1255 HILYARD STREET • P.O. BOX 10905 • EUGENE, OREGON 97440 • PHONE 503/686-7300

Response from: Sacred Heart General Hospital
Provider No. 380033

Comments Regarding

HCFA Medicare Mortality Information

Mortality rate data have not been shown to be a good indicator of quality. No independent study has been conducted which validates the ability of the Health Care Financing Administration's mortality data methodology to detect differences in quality. Adjustments for severity of illness; high risk, trauma or hospice populations; or other tertiary services provided are not included in the Health Care Financing Administration model. Sacred Heart General Hospital, Eugene, Oregon, is a tertiary medical center providing a full range of patient services.

It has not been possible to independently validate the Health Care Financing Administration data for the following reasons:

- A large discrepancy exists in the total number of patients treated during the calendar year due to the exclusion of readmissions, transfers to other acute care facilities, and transfers to the Hospital's rehabilitation or psychiatric programs.

- The Health Care Financing Administration data base includes deaths within 30 days of admission. Post discharge mortality data is not readily available to Sacred Heart, and therefore difficult to verify.

- Cause-of-death information is not provided or validated, but presumed to be related to the last admission, if within 30 days.

- Cases within specific diagnoses codes have been omitted, thus reducing the total number of patients reported.

For the reasons stated, great caution should be used in interpreting this information and in evaluating quality of care. The monitoring of quality is important and should be maintained through the peer review process. This process includes a wider range of criteria and involves evaluation by individual peers.

POST OFFICE BOX 14001
SALEM, OREGON 97309-5014
PHONE 503 370 5200
MEMORIAL UNIT
665 WINTER STREET SE
GENERAL UNIT
2561 CENTER STREET NE

Salem Hospital

October 17, 1987

William L. Roper M.D.
Administrator, Health Care
Financing Administration
Washington, D.C. 20201

Dear Doctor Roper:

The selected mortality information forwarded by your letter of September 21, 1987 has been reviewed with the following comments returned for your attention.

Although the opportunity to review the information is appreciated, the amount of time provided is inadequate for a detailed review. The data was provided without sufficient information to readily retrieve information from hospital files. Providing only the first six letters of the patient's last name significantly increased the amount of time required to positively identify the appropriate patient. Salem Hospital is a community oriented hospital and we identify our patients by name, not SSAN numbers.

It is, however, evident from our limited review that the information is not 100% correct. For example, one individual on the listing did not die on the date indicated. The actual date of death was 2/19/87, not 9/12/86 as listed. As this death was more than 30 days past admission the mortality for gastrointestinal catastrophes should be adjusted from 13 to 12 per cent.

The high risk category of "severe acute heart disease" includes abdominal aneurysms. The general public would probably not associate aneurysms with heart disease. Perhaps this should be a separate category or "severe acute heart disease" should be changed to "severe heart and circulatory disease".

These comments are provided to comply with the October 28th deadline specified in your letter. We intend to continue our review and will provide further comments upon completion of the review.

Sincerely,

Evan S. Lewis

Evan S. Lewis
President

Southern Coos General Hospital

640 West Fourth Bandon, Oregon 97411 347-2426

October 14, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

In reviewing the mortality information sent to us on September 21, 1987, we find the following:

1. Of the 26 deaths attributed to this hospital, 11 were discharged alive. Three of these patients were transferred by ambulance to other hospitals as follows:

   - Transferred to the Veterans Administration Hospital in Roseburg, Oregon on 1-20-86 where he apparently expired from metastatic carcinoma.

   - Transferred to St. Vincent's Hospital in Portland, Oregon on 8-26-86 where he apparently expired from the complications of metastatic carcinoma.

   - Transferred to Bay Area Hospital, Coos Bay, Oregon on 5-7-86 where she expired on 5-23-86 from acute pulmonary problems.

   The last admission of these three patients in 1986 was to the above-named hospitals and not Southern Coos General Hospital. Therefore, according to your methodology they should appear in the mortality information for those hospitals and not in ours.

2. The date of death for the patient listed as was actually 9-25-86 rather than 9-30-86 as shown in your listing.

One general comment--Since a large percentage of Medicare patients have serious chronic diseases which are usually the cause of their death, the fact that their hospital stay resulted in their being discharged alive should be viewed as a positive outcome without clouding the issue with their demise days

or weeks later in a nursing home or some other non-hospital setting. The inclusion of post-discharge deaths over which the hospital has no control is to infer a responsibility for those deaths that is unfair to the hospital and misleading to the public. Because payment mechanisms are tilting toward care of Medicare patients at the least expensive level, it would seem only appropriate that mortality statistics should be published for each of these levels, particularly if anyone is planning to use them for quality assessment purposes.

Sincerely,

Robert S. Smith

Robert S. Smith
Administrator

dmr

St. Charles MEDICAL CENTER

2500 N.E. NEFF ROAD • BEND, OREGON 97701-6015 • (503) 382-4321

October 27, 1987

Dr. William Roper, Administrator
Department of Health and Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

St. Charles Medical Center welcomes the opportunity to review and present a formal response to the analysis of 1986 hospital mortality data.

St. Charles Medical Center is a 164-bed acute care facility which serves as a regional referral and treatment center for the largest geographical medical service area in Oregon.

As a full-service medical center St. Charles offers care in specialty areas including cancer treatment, trauma, cardiology, dialysis, neurology and orthopedic services, as well as all other surgical specialties including neurosurgery. Quality of care is an ongoing and principal concern for the Medical Center as well as its wider medical community.

Based on a review of the statistics provided, which relate only to Medicare patients and not the total population treated by the Hospital, it is clear that St. Charles Medical Center is within the predicted mortality ranges in all of the categories of illnesses listed in the study.

The data has been reviewed by the Manager of our Medical Records Department, our Board Quality Assurance Committee, representatives of our Medical Staff and senior Hospital management.

With some minor exceptions, we found the information to be accurate. Where they occurred, discrepancies involved incorrect listings of principal diagnoses and dates of death. The corrected information is provided below by Patient Identification Number.

CORRECTIONS TO THE MEDICARE PATIENT LISTINGS FOR MORTALITY REVIEW SENT TO ST. CHARLES MEDICAL CENTER FROM HCFA

HIC Number	Incorrect Information	Correct Information
	Date of Death 2/24/86	2/23/86
	Principal Dx. 2971	197.2
	Principal Dx. 9591	852.22
	Principal Dx. V671	197.2
	Date of Death 1/31/86	1/8/86
	Principal Procedure 5794	87.73
	Principal Dx. 1629	197.2
	No Principal Procedure Listed	34.91

St. Charles' regional referral center role suggests that it will likely see a higher ratio of Medicare patients with more serious illnesses and this will have an impact on actual mortality statistics. It is significant that the model used for these results does not take into account all of the factors which clearly differentiate those Medicare patients who come to St. Charles Medical Center for treatment from the "average" Medicare patient the model describes.

While St. Charles' actual mortality rate appears favorably within the predicted mortality ranges, it is important for health care consumers, especially Medicare beneficiaries, to realize that such statistical data does not in and of itself measure hospital performance.

The mortality statistics are relevant as a part of the Hospital's current comprehensive quality assurance process. This process is current, ongoing and involves multiple levels of St. Charles' medical and patient care personnel. Within this context, the mortality information will be useful in identifying and cross-checking areas where reviews are appropriate.

Thank you for the opportunity to present this response on behalf of St. Charles Medical Center and those it serves.

Sincerely,

Sister Kathryn Hellmann
President and Chief Executive Officer

James W. Mahoney, M.D.
Chief of Medical Staff

St. Charles Medical Center
Medicare Provider No. 38-0047

ST. VINCENT HOSPITAL & MEDICAL CENTER
9205 SOUTHWEST BARNES ROAD
PORTLAND, OREGON 97225
PHONE (503) 297-4411

SISTERS OF PROVIDENCE
SERVING IN THE WEST SINCE 1856

October 20, 1987

SECOND MAILING DUE TO ADDRESS

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

We have reviewed the mortality information specific to St. Vincent Hospital and Medical Center which the Health Care Financing Administration plans to publish in December. The data appear to be accurate with the exception of five cases in which all the records show a different principal diagnoses. These cases are listed on the attached page.

As these data are made available to the public, it is important to note that while mortality rates are valuable and useful in identifying areas for further review, by themselves, they do not measure quality of care. There are many factors in quality care and both the Joint Commission on the Accreditation of Hospitals and the American Hospital Association are working to develop better methods to evaluate hospital quality. We look forward to the development of these measures.

The Governing Board, management and medical staff of St. Vincent Hospital and Medical Center consider quality care to be of the highest importance. The review of mortality data is an integral part of our comprehensive quality management program. Any indication of a potential quality problem leads to a prompt assessment and, if a problem is identified, to appropriate corrective action.

In the interest of accuracy we would appreciate it if you would verify and correct the information as necessary.

Sincerely,

Greg Van Pelt
Administrator

Enclosure

SISTERS OF PROVIDENCE INSTITUTIONS—ALASKA: PROVIDENCE HOSPITAL, ANCHORAGE—OUR LADY OF COMPASSION CARE CENTER, ANCHORAGE—WASHINGTON: PROVIDENCE CENTRAL MEMORIAL HOSPITAL, TOPPENISH—PROVIDENCE HOSPITAL, EVERETT—PROVIDENCE MEDICAL CENTER, SEATTLE—THE DePAUL RETIREMENT RESIDENCE AND MOUNT ST. VINCENT NURSING CENTER, SEATTLE—ST. ELIZABETH MEDICAL CENTER, YAKIMA—ST. PETER HOSPITAL, OLYMPIA—ST. JOSEPH HOSPITAL, ABERDEEN—ST. HELEN HOSPITAL, CHEHALIS—OREGON: PROVIDENCE CHILD CENTER, PORTLAND—PROVIDENCE MEDICAL CENTER, PORTLAND—ST. VINCENT HOSPITAL AND MEDICAL CENTER, PORTLAND—SEASIDE GENERAL HOSPITAL, SEASIDE—PROVIDENCE HOSPITAL, MEDFORD—PROVIDENCE MILWAUKIE HOSPITAL, MILWAUKIE—CALIFORNIA: PROVIDENCE HOSPITAL, OAKLAND—PROVIDENCE HIGH SCHOOL, BURBANK—SAINT JOSEPH MEDICAL CENTER, BURBANK.

Corrections of Diagnostic Category in HCFAs Mortality Data

PATIENT NUMBER	CATEGORY SHOWN AS	CATEGORY SHOULD BE	CODE SHOWN AS	CODE SHOULD BE
	PN	Gi	486	571.1
	UN	PN	799.1	507.0
	HL	HS	401.9	410.8
	RN	NE	584.9	276.5
	UN	PN	799.1	482.8

Tillamook County General Hospital

1000 Third St.
Tillamook,
Oregon 97141
(503) 842-4444

October 26, 1987

William L. Roper, MD, Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, DC 20201

RE: 1987 HCFA Mortality Rate for Tillamook County General Hospital

Dear Sir:

Tillamook County General Hospital, Medicare Provider Number 38-0070, appreciates the opportunity to provide written response in advance of the publication of the Mortality Rate Report by the Health Care Financial Administration.

We believe that while there may be some difficulties inherent in using mortality rates as a measure of quality in health care, the effort to provide the American public with reliable information should not be discouraged. We welcome this effort to improve American health care.

We are a small community hospital serving a fairly large retirement community. Many of our patients are referred for tertiary care to larger hospitals in Portland, Oregon which is 75 miles away. However, they prefer to return to their own community which provides such good support and comfort for them and their families when their death is near. Fully 45% of our patients are Medicare age with the many health problems encountered by us as we age. In fully, 50% of our deaths in 1986 the family and/or patients had requested no heroic medical measures be undertaken.

The Medical Staff of TCGH conducts an intensive review of the medical record of every patient who expires at this facility regarding medical management and overall care. Mortality review is an ongoing process of the Quality Assurance Program and peer review activities are an integral part of the monitoring of the health delivery system at our hospital.

We at Tillamook County General Hospital feel we have demonstrated our full commitment to quality health care. Our overall mortality rate is 11% as compared to an expected range of 11-20% as calculated by the Health Care Financial Administration.

One weakness that we see with this mortality rate information is that there is no built in measure of the severity of a patient's illness. Medical treatment is but one of the many factors that affects a hospital's death rate. The results of medical treatment are likely to be influenced by

A Member of Adventist Health System-West

the seriousness or advanced nature of the illness and by the general health status of the patient resulting in differing resistance to disease and response to treatment.

Our hospital's report is truly unique in each illness category, it would be an irresponsible use of this data to try to compare hospitals with each other. The only valid use of the actual and predicted mortality rates is to compare one hospital's actual rate **with its own** predicted rate. Every category TCGH mortality rates are within the predicted range for patients like ours. Our highest mortality rate (38%) is in cancer related illnesses. This figure is well within the range of the predicted mortality rates (7-53%). The second highest percentage of deaths at TCGH was in the category "severe acute heart disease". This rate was 25%, whereas the HCFA prediction was 19-57%.

In the category "low risk heart disease", TCGH had 34 cases and one fatality. In examination of the medical record in this one case, demonstrates that this patient was admitted with severe end-stage congestive heart failure. This patient does not therefore belong in the assigned category.

There were also six categories of those which were provided and which our death rate was 0%. They were those of gastrointestinal disease, urologic disease, gynecologic disease, orthopedic disorders, and infections in the blood.

Again, TCGH supports all responsible efforts to highlight quality of health care. Any questions regarding our report may be addressed to the President directly.

Sincerely,

C. Wendell Hesseltine
President

Calvin Hill, MD
Medical Staff President

CWH/pam

Western Lane Hospital

1525 12th Street P.O. Box 580

Florence, Oregon 97439-0580

(503) 997-3411

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland, 21207

Re: Western Lane Hospital (ID no. 380013) Mortality Information

We appreciate the opportunity to review the mortality information prior to its release.

Upon review of the attached listing of Western Lane Hospital 1986 patient deaths, we discovered what we feel is a double counting one patient death. Our records indicate that [redacted] was an inpatient at Western Lane Hospital and died on 6-12-86. We have no medical record or death record for [redacted] with a date of death of 6-12-86. I believe that the latter patient death referred to above should not be assigned to Western Lane Hospital.

Again, thank you for the opportunity to identify a potential error in the data prior to its release.

Sincerely,

James R. Barnhart
Administrator

cc: Oregon Association of Hospitals

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Pennsylvania

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ABINGTON MEM HOSP ABINGTON PA 19001	PA-19	3936	11	10-17	344	21	17-31	169	21	22-37	120	12	12-30	195	22	17-30	174	26	33-49	70	19	9-31	294	17	17-29
ALBERT EINSTEIN MED CNTR/O PHILADELPHIA PA 19147	PA-20	5036	14	10-17	427	21	17-31	197	27	22-36	113	19	12-31	283	18	18-29	214	30	32-48	107	32	16-36	342	26	17-29
ALIQUIPPA HOSPITAL ALIQUIPPA PA 15001	PA-21	1535	11	8-15	109	36	17-36	61	21	16-39	36	14	6-33	95	17	14-32	52	44	26-53	41	32	8-35	117	11	12-29
ALLEGHENY GENERAL HOSP PITTSBURGH PA 15212	PA-22 *	2905	6	6-13	325	18	20-35	42	7	14-41	40	18	7-33	62	19	12-33	12	42	16-66	29	14	7-39	150	13	11-25
ALLEGHENY VALLEY HOSP NATRONA HEIGHTS PA 15065	PA-23 *	2748	11	9-16	192	25	17-33	117	23	20-37	70	16	11-32	195	24	17-30	113	35	28-47	72	15	10-32	207	21	14-27
ALLENTOWN HOSPITAL ALLENTOWN PA 18102	PA-24	2157	15	11-17	169	32	17-35	83	22	20-40	48	19	10-35	124	33	16-32	84	39	30-52	37	11	9-39	119	23	14-31
ALLENTOWN OSTEO HOSP ALLENTOWN PA 18104	PA-25 *	1188	12	8-15	83	25	13-34	46	26	15-41	25	12	6-38	84	26	15-34	34	24	21-53	21	24	3-37	93	13	10-27
ALTOONA HOSP ALTOONA PA 16603	PA-26 *	3113	11	9-16	192	20	19-36	131	28	23-40	77	16	13-34	162	23	16-30	132	36	29-48	56	23	10-34	181	18	13-27
AMERICAN ONCOLOGIC HOSPITA PHILADELPHIA PA 19111	PA-27 *	369	25	23-33	234	25	24-41	.	.		6	67	7-72	3	67	4-84	1	100	2-98	11	45	21-75	10	50	17-72
ANDREW KAUL MEM HOSP SAINT MARYS PA 15857	PA-28	778	11	9-17	50	26	18-45	37	35	16-45	17	35	6-45	53	23	13-36	26	19	20-56	18	6	3-40	78	15	10-29
ARMSTRONG COUNTY MEMORIAL KITTANNING PA 16201	PA-29 *	2130	12	9-16	129	35	21-41	70	21	18-40	49	20	8-32	139	24	16-31	66	39	30-54	41	20	8-35	188	16	15-29
ASHLAND STATE GENERAL HOSP ASHLAND PA 17921	PA-30 *	1202	14	9-16	64	36	14-37	42	31	17-45	20	20	8-46	94	22	17-35	48	40	26-54	29	14	6-36	134	22	13-29
BARNES KASSON COUNTY HOSP SUSQUEHANNA PA 18847	PA-31 *	407	7	7-15	8	13	6-64	9	0	8-63	11	9	2-47	27	11	12-45	8	50	14-74	4	0	2-75	49	14	8-30
BERWICK HOSP BERWICK PA 18603	PA-32 *	1224	10	8-15	46	33	16-43	58	19	18-42	18	6	5-42	82	17	14-33	42	38	25-54	18	6	4-40	139	12	11-26
BLOOMSBURG HOSP BLOOMSBURG PA 17815	PA-33	1019	15	10-17	58	34	13-38	45	38	18-45	19	21	6-43	46	37	14-39	48	44	25-54	21	29	6-43	110	29	12-29
BRADDOCK GENERAL HOSPITAL BRADDOCK PA 15104	PA-34	1972	11	10-16	106	29	15-35	67	25	20-43	28	18	8-39	140	20	15-29	116	29	28-48	39	15	10-39	156	24	14-29
BRADFORD HOSPITAL BRADFORD PA 16701	PA-35	1068	10	7-15	46	20	11-38	29	24	15-48	21	10	4-37	55	20	13-35	29	48	22-57	34	12	5-33	90	13	10-27
BRANDYWINE HOSPITAL CALN PA 19320	PA-36	1524	11	10-17	75	31	18-41	48	31	17-43	48	19	10-35	112	19	18-35	61	38	28-54	37	16	10-39	156	11	14-29
BROOKVILLE HOSPITAL BROOKVILLE PA 15825	PA-37	846	13	9-16	45	20	11-37	26	38	16-52	21	14	6-41	35	34	14-44	37	43	25-56	25	36	9-44	86	17	11-29
BROWNSVILLE GENERAL HOSP BROWNSVILLE PA 15417	PA-38 *	937	10	10-17	32	38	16-49	24	25	15-52	23	17	6-39	59	22	13-35	47	30	25-53	21	33	9-47	113	13	14-31
BRYN MAWR HOSP BRYN MAWR PA 19010	PA-39 *	3774	11	9-15	359	21	17-32	123	25	21-38	99	20	12-31	184	21	18-31	153	31	30-47	41	2	6-32	248	20	16-29
BUCTAIL MEDICAL CTR RENOVO PA 17764	PA-40 *	152	9	8-20	3	67	3-84	3	33	3-83	4	25	4-77	4	75	3-76	8	25	14-74	7	0	5-64	26	8	7-38
BUTLER MEMORIAL HOSP BUTLER PA 16001	PA-41	2414	10	8-15	175	27	17-34	91	25	19-39	54	9	8-31	132	21	15-31	76	36	26-49	39	10	7-35	220	15	13-27
CANONSBURG GENERAL HOSPITA CANONSBURG PA 15317	PA-42	1254	12	10-17	50	42	18-45	32	28	14-45	33	12	7-36	58	19	15-38	35	49	26-59	36	19	9-38	173	20	13-27
CARBONDALE GEN HOSP CARBONDALE PA 18407	PA-43 *	428	13	8-17	19	37	9-48	15	33	11-55	10	10	3-51	23	39	8-42	18	44	20-63	19	21	5-42	54	9	8-30
CARLISLE HOSP CARLISLE PA 17013	PA-44	1585	13	9-16	122	23	13-32	82	26	19-40	36	11	7-34	85	20	14-32	97	31	25-46	32	19	8-38	109	17	12-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ABINGTON MEM HOSP ABINGTON PA 19001	48	21	10-42	48	23	23-53	148	9	5-17	25	0	0-50	341	4	3-9	222	5	2-11	40	0	0-45	322	3	3-9	237	2	0-5
ALBERT EINSTEIN MED CNTR/O PHILADELPHIA PA 19147	84	20	9-37	50	56	30-60	98	9	5-19	12	0	0-78	360	8	3-9	300	9	3-11	24	0	1-25	580	7	4-8	204	3	0-5
ALIQUIPPA HOSPITAL ALIQUIPPA PA 15001	12	8	5-55	7	29	7-68	22	9	2-30	15	0	0-99	135	6	2-10	127	5	1-12	13	0	0-97	180	4	2-9	80	0	0-10
ALLEGHENY GENERAL HOSP PITTSBURGH PA 15212	18	17	9-53	3	33	5-86	50	4	3-22	19	0	0-90	235	3	3-10	77	1	1-14	29	0	0-34	430	2	2-6	357	1	0-4
ALLEGHENY VALLEY HDSP NATRONA HEIGHTS PA 15065	14	29	9-58	39	26	22-55	65	11	3-18	10	0	0-100	297	5	3-9	130	5	2-12	26	0	0-88	231	2	3-9	162	0	0-6
ALLENTOWN HOSPITAL ALLENTOWN PA 18102	75	25	15-45	35	63	28-63	58	7	3-18	27	0	0-76	169	6	3-11	73	5	1-14	76	0	0-12	138	6	3-11	97	5	1-9
ALLENTOWN OSTEO HOSP ALLENTOWN PA 18104	12	0	5-55	9	67	19-77	20	5	2-33	3	0	0-100	139	8	2-11	53	8	1-17	11	0	0-100	101	4	2-11	66	2	0-11
ALTOONA HOSP ALTOONA PA 16603	42	31	17-51	33	36	23-57	64	23	5-21	21	0	0-60	313	5	3-9	144	1	2-12	43	0	0-69	301	5	3-8	172	1	0-6
AMERICAN ONCOLOGIC HDSPITA PHILADELPHIA PA 19111				2	100	8-96	3	33	1-81	1	0	0-100	5	0	1-68	6	0	0-63	1	0	0-100	1	100	0-98	10	20	1-47
ANDREW KAUL MEM HOSP SAINT MARYS PA 15857	14	14	6-53	6	50	14-81	26	8	3-29	4	0	0-100	109	4	2-11	25	0	0-27	6	0	0-100	62	2	1-14	34	3	0-19
ARMSTRONG COUNTY MEMORIAL KITTANNING PA 16201	19	32	13-57	18	33	18-62	41	15	3-23	3	0	0-100	167	7	2-10	171	6	2-11	20	0	0-83	182	1	3-10	127	2	0-7
ASHLAND STATE GENERAL HDSP ASHLAND PA 17921	16	19	7-53	8	63	13-74	23	22	2-30	2	0	0-100	147	5	2-10	64	5	2-16	14	0	0-93	128	7	2-10	54	2	0-13
BARNES KASSON COUNTY HDSP SUSQUEHANNA PA 18847	5	40	3-72	5	80	6-75	3	0	0-87	1	0	0-100	43	5	1-18	15	7	1-36	3	0	0-100	61	2	1-14	22	0	0-29
BERWICK HOSP BERWICK PA 18603	5	40	4-74	7	57	11-74	22	5	1-29	11	0	0-98	151	4	2-10	52	4	1-17	10	0	1-46	124	6	2-10	69	0	0-10
BLOOMSBURG HOSP BLOOMSBURG PA 17815	12	50	9-61	21	33	24-66	32	9	3-26	1	0	0-100	93	4	2-12	58	2	1-16	20	0	0-41	96	2	1-11	36	0	0-25
BRADDOCK GENERAL HOSPITAL BRADDOCK PA 15104	11	45	10-64	34	24	23-57	41	7	4-25	5	0	0-100	159	4	2-10	99	5	3-16	5	0	0-100	191	3	2-9	98	1	1-9
BRADFORD HOSPITAL BRADFORD PA 16701	9	0	4-60	17	18	16-61	26	4	3-30	9	0	0-98	104	6	2-13	35	6	1-21	8	0	0-100	113	12	2-11	65	2	1-12
BRANDYWINE HOSPITAL CALN PA 19320	17	12	7-51	17	47	16-61	28	7	2-25	7	0	0-88	121	4	2-12	58	7	2-17	5	0	0-100	147	1	3-11	61	0	0-12
BROOKVILLE HDSPITAL BROOKVILLE PA 15825	3	33	2-83	9	22	12-69	7	14	0-60	42	0	0-56	92	3	2-13	44	5	2-20	3	0	0-100	108	6	2-12	29	0	0-24
BROWNSVILLE GENERAL HDSP BROWNSVILLE PA 15417	5	60	11-83	18	11	18-62	18	0	1-33	1	0	0-100	96	2	3-13	39	3	1-20	1	0	0-100	156	2	3-11	51	2	0-16
BRYN MAWR HDSP BRYN MAWR PA 19010	31	26	11-48	38	42	21-54	131	11	4-15	7	0	0-100	358	5	3-9	168	4	2-11	39	3	0-41	412	5	3-8	289	1	0-4
BUCTAIL MEDICAL CTR RENOVO PA 17764	2	0	0-95	1	0	1-97		.			.		7	0	0-62	4	0	0-75	.	.		20	5	0-29	3	0	0-100
BUTLER MEMORIAL HOSP BUTLER PA 16001	14	21	5-53	12	25	18-70	52	6	3-20	12	8	0-94	253	2	2-8	132	4	1-12	38	0	0-37	232	8	2-8	123	1	0-7
CANONSBURG GENERAL HDSPITA CANONSBURG PA 15317	9	33	5-61	32	41	28-64	24	8	2-28	7	0	0-98	134	3	2-10	55	4	4-22	9	0	0-100	93	6	2-12	94	0	0-8
CARBONDALE GEN HDSP CARBONDALE PA 18407	5	60	2-71	7	43	11-74	7	0	0-59	2	0	0-100	43	0	1-17	25	4	1-27	.	.		40	3	1-18	25	0	0-30
CARLISLE HOSP CARLISLE PA 17013	17	41	9-54	21	33	16-57	49	14	3-21	12	0	0-98	147	7	2-11	64	6	1-15	15	0	0-99	95	4	1-11	96	3	0-8

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CARON HOSPITAL WERNERSVILLE PA 19565	PA-45 *	21	0	1-29	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
CENTRAL MEDICAL CENTER HO PITTSBURGH PA 15219	PA-46	1036	6	5-12	46	20	15-42	13	38	12-60	15	13	8-51	42	17	12-38	17	35	17-60	35	17	6-35	39	10	8-33
CENTRE COMMUNITY HOSP STATE COLLEGE PA 16803	PA-47 *	1683	14	10-17	174	32	18-36	69	25	17-39	31	26	8-37	130	24	17-32	87	41	28-50	28	11	8-40	156	22	11-25
CHAMBERSBURG HOSPITAL CHAMBERSBURG PA 17201	PA-48	1977	12	9-15	160	32	18-36	74	26	17-37	35	20	7-34	80	28	16-35	93	46	29-50	43	14	8-34	170	19	13-27
CHARLES COLE MEMORIAL HDSP COUDERSPORT PA 16915	PA-49 *	816	10	8-16	43	19	13-41	39	23	18-47	15	7	5-46	45	29	14-39	16	38	20-66	13	23	5-50	73	10	12-32
CHESTER CO HDSP WEST CHESTER PA 19380	PA-50 *	1949	12	9-16	173	23	14-31	61	28	19-43	54	24	8-31	134	28	16-32	78	42	27-50	55	11	10-35	151	17	13-28
CHESTNUT HILL HOSP PHILADELPHIA PA 19118	PA-51 *	2040	13	9-16	165	19	14-31	94	31	19-38	65	18	10-32	74	14	14-34	106	34	30-50	44	9	8-34	144	24	14-30
CITIZENS GENERAL HOSP NEW KENSINGTON PA 15068	PA-52	2191	12	9-16	180	21	16-32	81	20	18-38	63	10	8-30	142	24	16-31	117	36	28-48	54	22	10-35	102	16	12-30
CLARION OSTEOPATHIC COMM H CLARION PA 16214	PA-53 *	676	11	10-18	18	33	11-52	19	21	15-55	22	18	6-41	39	26	11-37	47	36	27-56	14	14	7-51	73	10	11-31
CLEARFIELD HDSP CLEARFIELD PA 16830	PA-54	1238	13	10-17	61	38	19-45	46	33	17-44	24	8	6-38	82	28	14-33	55	35	26-52	31	19	10-42	131	23	13-29
COALDALE STATE GNRL HOSP COALDALE PA 18218	PA-55 *	888	14	9-16	46	30	14-41	42	33	16-43	15	20	6-47	59	31	12-33	39	49	25-56	16	38	6-47	97	20	11-28
COLUMBIA HDSP COLUMBIA PA 17512	PA-56	443	14	8-16	30	23	12-45	14	43	12-57	10	10	2-50	33	36	10-38	15	53	21-68	11	27	2-48	42	14	7-32
COMMUNITY GENERAL HOSP READING PA 19601	PA-57	1412	12	8-15	117	21	14-33	65	25	18-41	41	20	7-33	98	24	14-32	40	53	28-59	15	20	5-47	94	12	11-28
COMMUNITY GENERAL OSTEOPAT HARRISBURG PA 17109	PA-58	1372	14	8-15	94	27	14-34	48	50	16-42	30	17	6-35	93	20	14-32	45	44	26-55	33	18	9-40	104	18	10-27
COMMUNITY HDSP OF LANCASTE LANCASTER PA 17604	PA-59	1072	10	8-15	70	26	18-42	28	18	16-49	12	25	5-51	59	32	13-35	19	58	20-62	48	8	7-32	66	14	11-31
COMMUNITY HOSPITAL KANE PA 16735	PA-60 *	426	9	9-17	12	33	10-60	12	42	11-60	13	23	7-52	28	7	10-40	20	30	22-63	18	11	6-45	49	16	10-34
COMMUNITY MEDICAL CTR SCRANTON PA 18510	PA-61 *	1974	10	7-14	125	18	13-31	62	24	16-39	41	15	8-33	121	21	13-29	76	49	27-50	31	D	5-34	153	16	11-26
CONEMAUGH VALLEY MEMORIAL JOHNSTOWN PA 15905	PA-62	2972	10	8-15	141	28	16-34	94	31	18-37	52	25	10-34	221	19	17-29	121	39	28-47	63	19	11-35	192	16	14-28
CORRY MEM HOSP CORRY PA 16407	PA-63	528	12	10-18	22	27	10-47	31	45	16-48	11	9	3-49	47	28	12-36	21	43	21-62	23	0	4-37	69	16	13-34
CROZER CHESTER MEDICAL CEN UPLAND PA 19013	PA-64	2396	12	10-16	188	26	18-35	89	28	19-38	46	13	11-36	133	22	16-31	125	28	30-49	41	22	10-38	161	15	15-30
DELAWARE CO MEM HDSP DREXEL HILL PA 19026	PA-65	2938	11	9-16	253	24	17-33	111	23	20-38	66	15	10-31	166	20	17-31	95	40	29-50	65	18	10-34	212	16	13-27
DELAWARE VALLEY MEDICAL CT LANGHORNE PA 19047	PA-66 *	889	13	9-16	49	29	13-39	39	28	16-44	11	36	3-50	67	16	12-32	38	29	23-54	24	8	8-43	84	25	10-28
DIVINE PROVIDENCE HDSP PITTSBURGH PA 15212	PA-67	1577	11	9-16	110	32	17-36	67	21	20-43	28	21	7-38	128	16	16-31	32	28	24-57	27	33	8-40	150	13	13-28
DIVINE PROVIDENCE HOSP WILLIAMSPORT PA 17701	PA-68 *	1584	10	8-15	132	27	20-39	32	34	15-46	41	22	10-36	61	21	13-34	36	50	25-57	27	15	10-44	105	19	12-29
DOYLESTOWN HOSP DOYLESTOWN PA 18901	PA-69	2140	12	10-16	156	27	17-34	81	33	21-42	56	25	12-35	111	27	16-33	78	40	29-52	38	24	8-37	157	20	15-30
DUBOIS REGIONAL MED CNTR DUBOIS PA 15801	PA-70	1804	12	9-15	115	38	20-40	38	34	17-46	29	21	8-39	107	23	16-33	53	32	25-51	29	21	7-38	140	18	16-32

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CARON HOSPITAL WERNERSVILLE PA 19565	.	.		.	.		.	.		.	.		1	0	0-100	.	.		.	.		.	.		.	.	
CENTRAL MEDICAL CENTER HO PITTSBURGH PA 15219	2	0	0-90	4	0	11-87	8	13	1-53	197	1	0-4	52	6	1-15	31	3	1-23	4	0	0-100	203	4	2-8	71	0	0-10
CENTRE COMMUNITY HOSP STATE COLLEGE PA 16803	11	18	12-66	15	33	17-64	36	6	3-25	7	0	0-100	137	7	2-10	59	2	1-16	21	0	0-95	130	4	2-10	91	1	1-9
CHAMBERSBURG HOSPITAL CHAMBERSBURG PA 17201	10	10	6-61	15	20	13-60	59	5	3-19	4	0	0-100	241	6	3-9	101	3	1-12	12	0	0-100	182	5	2-10	137	0	0-6
CHARLES COLE MEMORIAL HOSP COUDERSPORT PA 16915	9	22	5-61	8	63	12-72	19	11	2-32	5	0	0-100	86	5	2-13	55	7	2-17	8	0	0-100	51	4	1-15	78	0	0-9
CHESTER CO HOSP WEST CHESTER PA 19380	14	29	13-63	37	41	21-54	67	10	3-18	9	0	0-98	206	2	2-9	57	2	1-16	15	0	0-87	173	1	2-8	96	1	0-8
CHESTNUT HILL HOSP PHILADELPHIA PA 19118	23	26	8-48	25	40	20-58	111	5	3-15	28	0	0-46	186	6	3-10	114	5	1-12	18	0	0-88	128	6	2-10	149	1	0-6
CITIZENS GENERAL HOSP NEW KENSINGTON PA 15068	17	12	8-53	27	37	22-60	52	10	2-20	6	0	0-100	211	5	2-9	118	6	1-12	14	0	0-99	204	5	2-9	98	2	0-8
CLARION OSTEOPATHIC COMM H CLARION PA 16214	7	71	14-78	16	31	15-60	23	0	4-34	.	.		63	3	2-15	14	7	0-40	6	0	0-100	94	4	2-12	25	0	0-28
CLEARFIELD HOSP CLEARFIELD PA 16830	5	20	5-75	15	40	18-65	27	7	2-26	1	0	0-100	148	5	3-12	35	11	1-22	21	0	0-73	118	3	2-10	67	1	0-11
COALDALE STATE GNRL HOSP COALDALE PA 18218	4	25	1-76	5	60	8-79	12	8	1-42	16	6	0-78	82	4	2-13	37	0	2-22	7	0	0-100	92	2	2-12	36	6	0-18
COLUMBIA HOSP COLUMBIA PA 17512	8	38	4-62	3	67	4-84	13	8	1-41	.	.		61	7	1-14	9	0	0-59	2	0	0-100	41	2	1-18	22	5	0-27
COMMUNITY GENERAL HOSP READING PA 19601	9	22	6-63	9	44	10-66	35	9	2-24	8	0	0-94	162	7	2-10	47	2	1-18	17	0	0-68	91	2	1-11	131	3	0-6
COMMUNITY GENERAL OSTEOPAT HARRISBURG PA 17109	10	20	5-59	19	42	20-63	46	11	6-27	5	0	0-100	133	5	3-12	81	6	2-15	10	0	0-99	81	4	2-12	162	1	0-6
COMMUNITY HOSP OF LANCASTE LANCASTER PA 17604	9	33	4-60	7	14	15-79	24	17	2-29	5	20	0-100	129	3	2-11	70	3	1-15	7	0	0-100	127	3	2-10	65	0	0-11
COMMUNITY HOSPITAL KANE PA 16735	3	33	6-88	1	0	2-98	7	0	2-58	.	.		53	0	1-16	19	0	0-32	3	0	0-100	42	10	1-18	23	0	0-29
COMMUNITY MEDICAL CTR SCRANTON PA 18510	12	8	6-56	30	27	19-54	46	11	2-20	4	0	0-100	182	3	2-10	64	11	1-16	19	0	0-98	145	4	2-9	159	1	0-6
CONEMAUGH VALLEY MEMORIAL JOHNSTOWN PA 15905	22	14	10-51	22	45	18-59	48	6	3-21	47	0	0-26	262	4	3-9	133	4	2-13	12	0	0-94	296	1	3-8	198	0	0-5
CORRY MEM HOSP CORRY PA 16407	2	50	0-90	2	0	5-93	3	33	0-84	.	.		40	3	2-19	14	7	1-38	4	0	0-100	66	3	1-13	16	0	0-46
CROZER CHESTER MEDICAL CEN UPLAND PA 19013	22	32	14-56	19	42	19-62	36	22	3-25	11	0	0-97	210	5	3-10	134	9	1-12	19	0	0-90	175	2	3-10	94	3	0-8
DELAWARE CO MEM HOSP DREXEL HILL PA 19026	18	6	7-51	26	46	23-61	82	6	4-18	16	6	0-80	300	3	3-9	130	4	1-11	21	0	0-56	216	4	3-9	216	0	1-5
DELAWARE VALLEY MEDICAL CT LANGHORNE PA 19047	4	75	10-87	3	33	6-87	14	0	1-38	5	0	0-100	84	8	2-13	37	8	1-20	5	20	0-100	122	9	3-12	33	0	0-21
DIVINE PROVIDENCE HOSP PITTSBURGH PA 15212	10	40	6-60	13	46	17-68	23	0	3-31	3	0	0-100	176	6	2-10	82	9	3-16	4	0	0-100	115	3	2-11	126	2	0-7
DIVINE PROVIDENCE HDSP WILLIAMSPORT PA 17701	11	18	10-64	3	67	5-86	40	8	2-22	16	0	0-94	143	3	3-12	64	2	2-16	14	0	0-98	130	4	2-10	137	0	0-6
DOYLESTOWN HOSP DOYLESTOWN PA 18901	2	0	0-90	22	45	21-62	63	6	3-20	16	0	0-93	198	7	3-11	101	5	1-13	37	0	0-39	150	4	2-10	104	2	1-9
DUBOIS REGIONAL MED CNTR DUBOIS PA 15801	20	30	12-55	18	50	20-65	44	7	3-22	20	0	0-75	196	5	3-11	96	5	2-14	13	0	0-98	149	6	2-10	98	2	0-8

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
EASTON HOSP EASTON PA 18042	PA-71 *	3285	10	9-16	253	18	15-31	106	25	20-39	68	13	11-32	174	22	18-31	131	34	33-51	74	12	11-33	249	16	13-26
ELK COUNTY GENERAL HOSPITA RIDGWAY PA 15853	PA-72 *	441	11	9-17	20	50	14-54	23	9	15-52	7	0	2-60	19	21	10-48	12	50	18-69	10	10	4-54	51	24	12-36
ELLWOOD CITY HOSP ELLWOOD CITY PA 16117	PA-73 *	1030	10	9-17	39	21	14-43	36	28	15-44	27	11	8-40	74	18	13-32	46	41	26-55	30	13	8-40	148	12	13-28
EPHRATA COMM HOSP EPHRATA PA 17522	PA-74	1046	10	9-16	76	22	15-38	27	26	17-51	12	8	5-51	51	25	13-37	51	27	25-53	25	16	6-39	84	21	14-33
EPISCOPAL HOSPITAL PHILADELPHIA PA 19125	PA-75	1342	11	8-15	89	26	18-39	51	12	16-41	14	7	6-50	74	15	13-32	37	46	23-54	33	18	13-45	88	20	10-28
EVANGELICAL COMMUNITY HOSP LEWISBURG PA 17837	PA-76	1541	13	10-17	73	27	16-39	58	28	21-45	49	14	8-31	115	28	18-35	76	34	28-51	23	30	9-44	141	19	14-30
EYE AND EAR HOSP OF PITTSB PITTSBURGH PA 15213	PA-77	966	1	2-9	69	10	17-41	.	.		.	.		.	.		.	.		5	20	2-69	8	0	2-55
FORBES METROPOLITAN HEALTH PITTSBURGH PA 15221	PA-78 *	1669	11	9-16	87	22	15-36	50	38	18-43	38	13	8-35	120	19	15-31	45	33	25-54	50	22	13-39	149	15	16-31
FORBES REGIONAL HEALTH CEN MONROEVILLE PA 15146	PA-79 *	3082	10	9-15	198	21	17-34	100	20	21-41	66	15	10-32	194	20	17-30	91	48	27-48	61	13	11-35	270	17	14-26
FRANKFORD HOSP PHILADELPHIA PA 19114	PA-80	3149	13	9-16	208	25	17-33	136	23	20-36	87	21	12-32	173	20	15-29	166	38	29-46	84	17	10-31	269	23	13-25
FRANKLIN REGIONAL MEDCL CN FRANKLIN PA 16323	PA-81 *	2091	10	10-16	141	33	27-46	47	23	16-42	43	26	11-38	98	16	17-35	62	42	27-52	33	12	7-37	192	13	15-29
FULTON COUNTY MED CTR MCCONNELLSBURG PA 17233	PA-82 *	282	14	9-19	7	43	3-62	9	22	9-64	12	8	4-49	19	21	9-47	20	20	18-59	11	18	4-51	44	27	7-31
GEISINGER MEDICAL CTR DANVILLE PA 17822	PA-83	4467	10	9-15	444	19	20-34	107	28	20-38	63	24	10-33	141	21	16-31	171	41	30-46	48	21	11-38	219	20	15-29
GEISINGER-WYOMING VALLEY M WILKES BARRE PA 18711	PA-84	1766	10	8-15	98	23	15-35	59	20	17-41	23	4	6-39	93	23	14-31	85	26	27-49	37	19	9-38	132	18	10-26
GERMANTOWN HOSPITAL MED C PHILADELPHIA PA 19144	PA-85 *	2086	14	10-17	163	21	18-36	101	26	19-38	41	34	11-38	137	21	15-30	61	25	27-52	61	18	10-33	161	32	15-30
GNADEN HUETTEN MEM HOSP LEHIGHTON PA 18235	PA-86	823	10	7-14	32	41	13-45	24	46	13-48	15	0	3-42	56	27	12-35	28	43	22-57	15	27	4-45	87	14	9-27
GOOD SAMARITAN HOSP POTTSVILLE PA 17901	PA-87	2247	13	10-16	140	29	18-37	96	30	20-40	53	11	9-33	200	28	16-28	90	39	27-49	50	32	10-36	168	22	13-27
GOOD SAMARITAN HOSPITAL LEBANON PA 17042	PA-88	2132	14	10-17	212	30	19-35	114	21	21-39	29	28	8-38	128	28	15-31	110	39	29-48	41	17	10-37	137	21	12-27
GRADUATE HOSP PHILADELPHIA PA 19146	PA-89	2433	11	8-15	194	30	19-36	61	33	16-39	57	19	10-33	121	15	16-32	106	32	28-48	48	21	10-37	113	26	11-28
GRAND VIEW HOSP SELLERSVILLE PA 18960	PA-90	1921	11	10-17	126	25	17-36	65	26	20-43	54	13	11-35	112	22	15-31	91	32	30-51	60	23	15-40	136	17	14-30
GREENE COUNTY MEMORIAL HOS WAYNESBURG PA 15370	PA-91	858	14	12-20	46	30	18-46	30	33	19-53	19	21	6-42	75	17	15-34	54	43	26-53	39	18	12-41	102	21	14-32
GREENVILLE HOSP GREENVILLE PA 16125	PA-92	2246	8	6-13	111	28	18-38	62	35	19-43	33	21	7-36	92	16	16-34	63	41	28-53	23	13	7-42	128	12	12-28
HAHNEMANN UNIVERSITY HOSP PHILADELPHIA PA 19102	PA-93	2516	12	10-16	193	26	26-43	36	17	15-44	54	28	12-36	117	16	16-32	119	29	27-46	56	32	15-41	103	24	13-31
HAMOT MEDICAL CTR ERIE PA 16550	PA-94	3363	9	7-14	256	24	17-32	94	22	19-38	57	18	9-31	158	19	16-30	94	44	28-49	51	8	9-34	166	20	14-29
HANOVER GENERAL HOSP HANOVER PA 17331	PA-95	1475	11	10-17	112	21	17-37	78	31	20-41	25	16	7-40	97	18	14-31	92	39	29-50	17	12	4-42	120	20	13-29
HARRISBURG HOSP HARRISBURG PA 17101	PA-96	3395	12	9-15	266	24	16-32	110	22	19-37	87	17	10-29	204	18	17-29	131	37	28-46	59	24	10-34	262	18	14-27

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
EASTON HOSP EASTON PA 18042	19	26	12-56	19	32	18-61	62	6	4-21	13	0	0-98	320	4	3-9	186	7	2-11	15	0	0-99	397	4	3-8	177	2	0-5
ELK COUNTY GENERAL HOSPITA RIOGWAY PA 15853	1	100	3-100	3	67	5-86	3	0	1-81	.	.		41	7	2-21	10	0	1-47	2	0	0-100	32	3	1-21	22	0	0-31
ELLWOOO CITY HOSP ELLWOOO CITY PA 16117	8	25	6-65	3	33	5-86	16	0	2-38	.	.		106	6	3-14	61	2	1-16	11	0	0-99	142	3	2-9	40	3	0-16
EPHRATA COMM HOSP EPHRATA PA 17522	9	33	7-64	12	25	16-68	28	4	3-29	2	0	0-100	146	2	2-10	36	0	1-21	5	0	0-100	83	6	2-13	51	0	0-13
EPISCOPAL HOSPITAL PHILAOELPHIA PA 19125	9	22	4-59	11	55	14-67	19	16	4-37	14	0	0-87	108	4	2-12	56	5	1-16	9	0	0-100	281	8	2-8	51	2	0-15
EVANGELICAL COMMUNITY HOSP LEWISBURG PA 17837	8	38	8-68	21	38	20-61	41	10	4-25	21	0	0-80	201	6	3-10	74	11	3-17	15	0	0-90	138	5	2-10	79	1	0-10
EYE ANO EAR HOSP OF PITTSB PITTSBURGH PA 15213	.	.		.	.		.	.		534	0	0-2	4	0	0-78	.	.		.	.		3	0	0-96	5	0	0-92
FORBES METROPOLITAN HEALTH PITTSBURGH PA 15221	13	23	4-52	11	64	17-71	43	5	4-24	.	.		200	5	2-9	92	5	2-14	2	0	0-100	152	3	2-9	95	3	1-9
FORBES REGIONAL HEALTH CEN MONROEVILLE PA 15146	29	10	9-47	36	33	23-57	61	8	3-19	5	0	0-100	329	3	3-8	177	5	2-11	24	0	0-89	244	5	2-8	186	1	0-5
FRANKFORO HOSP PHILAOELPHIA PA 19114	16	19	6-50	33	36	22-57	112	10	4-16	35	0	0-35	280	5	3-9	148	7	3-13	18	0	0-71	246	5	2-8	181	3	0-6
FRANKLIN REGIONAL MEOCL CN FRANKLIN PA 16323	9	33	10-69	33	21	23-58	30	13	4-29	39	0	0-29	215	2	4-11	112	9	2-14	20	0	0-77	204	3	2-9	171	1	0-6
FULTON COUNTY MEO CTR MCCONNELLSBURG PA 17233	5	40	2-71	1	100	2-98	.	.		.	.		20	5	1-29	7	0	0-68	.	.		27	4	0-22	11	0	0-49
GEISINGER MEOICAL CTR OANVILLE PA 17822	42	19	11-45	56	25	27-56	57	5	4-22	134	0	0-6	353	7	4-10	121	4	2-14	37	0	0-50	432	7	3-8	308	1	0-4
GEISINGER-WYOMING VALLEY M WILKES BARRE PA 18711	12	8	9-61	31	29	17-51	15	13	1-37	2	0	0-100	189	4	2-9	81	7	2-15	10	0	0-96	157	5	2-9	94	1	0-9
GERMANTOWN HOSPITAL MEO C PHILADELPHIA PA 19144	18	44	11-56	29	38	20-56	63	11	4-20	7	0	0-100	183	12	4-12	87	14	2-15	16	0	0-73	137	2	2-11	147	3	0-6
GNAOEN HUETTEN MEM HOSP LEHIGHTON PA 18235	2	50	0-91	5	20	11-81	17	6	1-34	18	0	0-77	97	2	2-11	69	4	1-15	12	0	0-98	53	2	1-14	48	2	0-14
GOOO SAMARITAN HOSP POTTSVILLE PA 17901	12	17	10-62	27	30	21-58	44	2	4-23	24	0	0-35	239	7	3-10	88	0	3-16	12	0	0-98	233	2	3-9	115	3	1-7
GOOD SAMARITAN HOSPITAL LEBANON PA 17042	12	25	13-66	29	34	18-55	62	6	4-20	9	0	0-99	264	7	3-10	101	2	1-12	28	0	0-56	190	6	2-9	83	2	0-9
GRAOUATE HOSP PHILAOELPHIA PA 19146	13	15	7-56	22	36	17-57	37	14	2-22	17	0	0-77	184	5	4-12	83	0	1-14	4	0	0-100	514	5	3-7	162	2	0-6
GRANO VIEW HOSP SELLERSVILLE PA 18960	8	25	6-66	30	43	24-60	52	10	5-23	5	0	0-100	159	5	3-11	87	6	1-13	19	0	0-48	195	2	2-9	101	2	0-8
GREENE COUNTY MEMORIAL HOS WAYNESBURG PA 15370	16	19	8-54	10	40	12-67	12	0	2-43	.	.		73	5	3-16	42	2	2-21	3	0	0-100	82	4	1-11	28	0	0-25
GREENVILLE HOSP GREENVILLE PA 16125	9	33	8-66	6	33	13-80	31	6	3-26	9	0	0-97	176	2	2-10	77	3	1-14	15	0	0-100	121	6	2-11	610	0	0-3
HAHNEMANN UNIVERSITY HOSP PHILADELPHIA PA 19102	50	10	7-38	16	56	22-69	23	17	3-31	17	6	0-56	118	8	4-14	68	1	1-15	13	0	0-76	507	9	4-9	120	4	0-7
HAMOT MEOICAL CTR ERIE PA 16550	14	21	8-57	17	29	13-57	75	4	3-17	40	0	0-44	241	4	2-9	158	6	1-11	18	0	0-98	525	4	3-7	240	2	0-5
HANOVER GENERAL HOSP HANOVER PA 17331	7	29	5-66	6	33	7-73	36	3	3-24	12	0	0-96	108	6	2-12	103	2	1-13	18	0	0-71	155	3	2-9	84	2	0-9
HARRISBURG HOSP HARRISBURG PA 17101	26	54	11-51	29	48	26-63	82	7	4-18	13	0	0-96	298	4	3-9	167	11	4-14	27	0	0-67	456	5	3-8	203	1	0-5

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAVERFORD GENERAL HOSP HAVERTOWN PA 19083	PA-97	924	16	10-17	62	32	17-42	50	30	18-44	17	12	4-41	74	28	14-34	37	57	25-57	23	17	7-42	70	30	13-34
HAZLETON GENERAL HOSP HAZLETON PA 18201	PA-98	1428	13	10-17	93	25	20-42	67	36	17-40	37	27	9-37	103	19	14-31	68	43	26-50	19	5	5-41	138	17	10-25
HAZLETON ST JOSEPH MED CTR HAZLETON PA 18201	PA-99	1471	11	9-16	82	23	18-40	55	31	17-41	43	12	9-35	83	20	13-31	51	33	26-54	37	24	8-36	118	16	13-29
HENRY CLAY FRICK COMMUNITY MOUNT PLEASANT PA 15666	PA-100	1664	10	8-15	76	33	17-40	59	19	18-42	45	22	11-37	128	22	15-30	51	39	25-52	22	9	6-42	121	16	13-29
HIGHLANDS HOSPITAL AND HEA CONNELLSVILLE PA 15425	PA-101*	487	14	8-16	12	50	8-56	19	37	13-53	5	60	8-77	42	24	10-35	15	27	17-63	33	24	6-35	53	19	10-33
HOLY REDEEMER HOSP MED C MEADOWBROOK PA 19046	PA-102	2782	10	9-16	227	26	19-35	110	26	21-39	44	14	9-33	188	18	16-29	67	28	26-50	63	11	8-31	221	20	14-27
HOLY SPIRIT HOSP CAMP HILL PA 17011	PA-103	3025	11	8-15	236	23	19-35	118	25	20-37	68	13	7-27	159	29	17-32	94	40	29-50	58	17	8-31	224	21	12-25
HOSP OF HOME FOR JEWISH AG PHILADELPHIA PA 19141	PA-104	512	18	11-20	8	25	6-63	11	9	9-59	8	38	3-58	30	27	16-49	17	41	26-71	37	43	11-41	64	22	18-41
HOSP OF UNIV OF PENNSYLVAN PHILADELPHIA PA 19104	PA-105	4004	8	8-14	449	21	21-35	64	11	16-38	42	21	9-35	93	16	13-30	92	33	27-48	66	18	9-32	167	16	14-28
HOSPITAL OF THE MED COLL O PHILADELPHIA PA 19129	PA-106	1816	11	8-15	137	28	18-37	61	23	15-38	58	16	6-28	85	16	14-33	82	26	27-49	38	26	10-39	101	14	11-27
HOSPITAL PHILA COLLEGE OST PHILADELPHIA PA 19131	PA-107	1134	13	10-17	117	26	20-40	31	29	14-45	22	27	3-35	79	14	12-31	47	36	27-55	13	0	2-44	87	30	12-31
INDIANA HOSPITAL INDIANA PA 15701	PA-108	1724	11	9-16	82	15	12-32	77	32	21-42	23	22	7-41	82	29	14-33	77	29	27-50	43	16	10-37	169	17	13-28
JAMES C GIUFFRE MED CTR PHILADELPHIA PA 19122	PA-109*	464	9	8-17	18	39	12-53	11	27	9-58	12	25	6-53	39	13	10-35	25	20	23-60	16	19	5-44	35	23	10-37
JAMESON MEM HOSP NEW CASTLE PA 16101	PA-110	2009	11	9-15	109	23	19-39	40	38	16-44	29	14	8-38	137	26	17-32	63	35	27-52	38	16	11-41	206	17	14-27
JC BLAIR MEMORIAL HOSPITAL HUNTINGDON PA 16652	PA-111*	854	8	10-17	54	24	15-41	41	22	15-42	21	5	6-41	59	14	13-35	45	27	24-53	23	9	4-37	89	7	11-29
JEANES HOSP PHILADELPHIA PA 19111	PA-112*	2796	13	10-17	257	25	19-35	98	24	20-39	74	22	9-30	190	24	19-32	101	42	31-52	60	20	14-39	203	30	18-32
JEANNETTE DISTRICT MEMORIA JEANNETTE PA 15644	PA-113	1794	11	10-16	109	28	19-39	50	34	19-45	24	17	7-40	143	21	16-31	73	32	28-52	48	19	10-36	159	13	13-27
JEFFERSON HOSPITAL PITTSBURGH PA 15236	PA-114*	4110	10	8-15	238	29	21-37	126	26	20-37	79	15	11-31	232	22	17-29	166	32	29-46	86	17	9-30	315	16	14-25
JERSEY SHORE HOSPITAL JERSEY SHORE PA 17740	PA-115*	438	11	8-16	21	29	13-52	12	42	9-56	6	0	1-63	19	16	11-50	24	50	21-59	11	9	3-51	31	10	8-36
JOHN F KENNEDY MEMORIAL HO PHILADELPHIA PA 19124	PA-116	933	13	9-17	47	21	15-43	50	38	15-40	21	38	6-40	72	22	14-35	43	28	25-54	35	31	9-38	59	20	10-32
KENSINGTON HOSP PHILADELPHIA PA 19122	PA-117*	119	1	3-14	1	0	0-97	1	0	1-97	1	100	1-97	9	0	4-55	.	.		1	0	0-100	7	0	5-64
LANCASTER GENERAL HOSPITAL LANCASTER PA 17604	PA-118*	5009	10	9-15	415	18	19-33	118	27	23-42	85	13	12-32	282	25	18-29	202	36	32-48	103	12	13-34	283	18	14-26
LANKENAU HOSP PHILADELPHIA PA 19151	PA-119	4294	10	9-15	373	25	18-33	173	24	21-36	122	15	10-27	216	16	17-29	140	31	30-48	71	17	11-34	289	17	14-26
LATROBE AREA HOSP LATROBE PA 15650	PA-120*	2889	11	8-15	179	31	19-36	104	30	20-38	62	15	8-29	184	18	16-29	77	36	28-51	67	13	9-32	260	16	14-26
LAWNDALE COMMUNITY HOSP PHILADELPHIA PA 19111	PA-121*	532	8	8-16	31	35	13-46	11	18	8-57	11	27	3-49	43	14	13-39	16	0	20-65	11	18	5-54	55	11	9-30
LEBANON VLY GEN HOSP LEBANON PA 17042	PA-122*	405	13	8-16	32	19	9-39	19	42	11-49	6	0	1-63	31	35	10-39	22	50	19-58	15	7	3-42	24	17	6-37

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAVERFORD GENERAL HOSP HAVERTOWN PA 19083	3	67	6-88	13	54	14-63	25	4	2-27	4	0	0-100	74	5	1-12	57	4	1-16	7	0	0-100	71	7	2-13	55	0	0-13
HAZLETON GENERAL HOSP HAZLETON PA 18201	16	25	4-48	10	60	18-74	47	2	2-20	5	0	0-100	150	7	3-11	74	1	2-16	8	0	0-95	139	4	2-10	64	5	0-11
HAZLETON ST JOSEPH MED CTR HAZLETON PA 18201	14	43	13-63	10	40	17-73	30	7	3-27	9	0	0-93	180	3	2-9	56	7	1-17	13	0	0-63	160	3	2-9	62	0	0-11
HENRY CLAY FRICK COMMUNITY MOUNT PLEASANT PA 15666	10	20	5-59	17	47	18-63	32	19	2-24	.	.		186	6	3-11	103	4	2-14	14	0	0-99	202	3	2-9	98	1	1-8
HIGHLANDS HDSPITAL AND HEA CONNELLSVILLE PA 15425	5	60	3-73	6	50	7-72	8	13	1-53	2	0	0-100	40	0	1-18	23	4	2-30	1	0	0-100	36	3	1-18	18	0	0-39
HOLY REDEEMER HOSP MED C MEADOW8ROOK PA 19046	15	13	14-63	43	35	23-55	82	12	4-18	19	0	0-80	303	4	3-10	102	1	1-12	27	0	0-45	255	4	2-8	231	1	0-5
HOLY SPIRIT HOSP CAMP HILL PA 17011	9	56	9-67	39	41	23-56	85	7	3-17	130	0	0-8	247	4	3-9	166	5	2-11	32	0	0-79	201	5	2-9	230	2	0-5
HOSP OF HOME FOR JEWISH AG PHILADELPHIA PA 19141	4	25	3-77	9	44	18-76	2	0	1-89	.	.		33	12	2-23	41	22	4-26	1	0	2-98	37	3	1-20	62	0	0-11
HOSP OF UNIV OF PENNSYLVAN PHILADELPHIA PA 19104	65	11	4-33	20	60	17-59	34	18	4-27	25	0	0-73	260	5	4-11	194	5	2-11	35	0	0-33	546	8	4-9	298	0	1-4
HOSPITAL OF THE MED COLL O PHILADELPHIA PA 19129	35	17	6-41	11	45	16-70	37	8	2-22	8	0	0-100	92	8	1-11	56	4	2-18	9	0	0-81	237	8	3-9	104	1	0-8
HOSPITAL PHILA COLLEGE OST PHILAOELPHIA PA 19131	22	36	14-56	20	45	17-59	20	0	2-33	3	0	0-100	84	6	2-13	67	4	1-15	6	0	0-100	128	2	2-11	45	0	0-16
INDIANA HDSPITAL INDIANA PA 15701	22	18	12-54	18	50	17-60	45	11	4-24	12	0	0-91	201	5	3-10	104	5	2-13	16	0	0-42	173	2	2-9	80	3	0-10
JAMES C GIUFFRE MEO CTR PHILADELPHIA PA 19122	2	0	1-90	9	0	7-62	7	14	1-57	.	.		23	0	1-26	11	0	0-45	1	0	0-100	83	0	2-12	11	0	0-95
JAMESON MEM HOSP NEW CASTLE PA 16101	18	39	12-58	15	7	15-62	49	6	3-22	11	0	0-91	242	7	3-9	81	4	2-15	20	0	0-69	220	3	2-8	176	0	0-5
JC 8LAIR MEMDRIAL HOSPITAL HUNTINGDON PA 16652	6	17	5-70	8	25	11-71	27	0	3-29	7	0	0-99	71	1	2-15	19	5	1-31	8	0	0-100	68	4	2-14	66	0	0-11
JEANES HOSP PHILADELPHIA PA 19111	12	42	7-58	36	42	24-58	90	6	2-15	19	0	0-81	263	5	3-9	114	11	3-14	24	0	0-32	257	3	3-8	237	3	1-5
JEANNETTE DISTRICT MEMORIA JEANNETTE PA 15644	11	36	7-60	32	25	21-57	29	10	3-27	2	0	0-100	164	5	3-11	64	5	2-16	13	0	0-100	178	3	2-8	96	5	0-8
JEFFERSON HOSPITAL PITTS8URGH PA 15236	18	22	5-47	40	30	22-54	44	16	4-23	18	0	0-81	449	4	3-8	190	4	1-11	11	0	0-100	296	3	2-8	264	1	0-4
JERSEY SHORE HOSPITAL JERSEY SHORE PA 17740	3	33	2-82	6	50	9-74	13	8	1-40	.	.		49	4	2-17	18	6	0-34	7	0	0-98	52	0	1-15	35	6	0-18
JOHN F KENNEOY MEMORIAL HD PHILADELPHIA PA 19124	14	43	13-64	14	36	18-67	19	0	1-31	2	0	0-100	73	4	2-14	80	1	1-13	7	0	0-100	98	1	2-11	55	4	0-13
KENSINGTON HOSP PHILADELPHIA PA 19122	.	.		.	.		.	.		.	.		2	0	0-97	1	0	0-100	5	0	0-100	33	0	1-19	7	0	0-97
LANCASTER GENERAL HOSPITAL LANCASTER PA 17604	30	20	11-49	54	37	23-52	143	3	5-16	82	0	0-9	410	4	4-9	230	2	1-10	31	0	0-48	582	4	3-8	419	2	1-4
LANKENAU HOSP PHILADELPHIA PA 19151	32	19	7-43	28	50	25-63	106	10	4-17	146	0	0-6	323	3	3-10	164	5	2-12	48	0	0-38	679	7	3-7	211	1	0-5
LATRO8E AREA HOSP LATROBE PA 15650	20	45	9-51	37	24	20-53	66	11	3-19	25	0	0-63	220	5	3-10	109	2	2-13	24	0	0-46	369	4	2-7	154	2	0-6
LAWNDALE COMMUNITY HOSP PHILADELPHIA PA 19111	4	25	1-76	.	.		14	7	2-40	1	0	0-100	86	6	2-13	20	5	1-31	2	0	0-100	43	2	1-17	35	0	0-25
LEBANON VLY GEN HOSP LE8ANON PA 17042	5	60	7-78	1	100	2-98	18	6	3-36	.	.		51	2	1-15	19	0	0-34	13	0	0-97	33	3	1-20	14	0	0-71

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
LEE HDSP JOHNSTOWN PA 15901	PA-123	2379	12	9-16	136	26	18-36	100	33	21-40	46	11	8-33	180	27	16-30	92	38	27-48	35	26	12-43	193	14	13-27
LEHIGH VALLEY HDSPITAL CEN ALLENTOWN PA 18105	PA-124*	4854	9	8-14	397	19	18-32	149	30	22-38	67	7	9-30	192	24	16-29	192	35	29-45	39	15	8-35	226	15	15-28
LEWISTON HOSP LEWISTOWN PA 17044	PA-125	2126	11	10-16	130	24	18-36	70	31	18-40	48	15	9-33	130	19	16-31	84	39	29-51	57	7	9-34	240	13	15-28
LOCK HAVEN HOSPITAL LOCK HAVEN PA 17745	PA-126	866	9	9-17	53	26	16-42	47	26	16-42	13	23	4-46	43	19	11-37	39	38	21-52	23	17	7-42	87	8	12-30
LOWER BUCKS HOSP BRISTDL PA 19007	PA-127*	1762	12	8-15	96	19	15-36	82	28	18-39	33	12	8-37	105	27	14-31	75	52	27-50	36	22	10-40	125	19	12-28
MAGEE WOMEN'S HOSP PITTSBURGH PA 15213	PA-128	414	6	8-17	141	9	14-31	1	0	1-97	15	40	8-51	2	0	0-91	3	0	5-85	5	40	7-77	5	0	0-69
MCKEESPORT HOSPITAL MCKEESPORT PA 15132	PA-129	3777	14	10-17	372	34	21-36	122	31	20-37	103	26	13-31	264	22	17-29	173	29	28-45	89	22	11-33	312	17	14-25
MEADVILLE MEDICAL CENTER MEADVILLE PA 16335	PA-130	2201	10	9-15	107	30	18-38	82	23	19-39	54	17	10-34	117	23	17-33	69	41	29-53	41	7	9-36	208	17	14-27
MEDICAL CENTER BEAVER PA I BEAVER PA 15009	PA-131*	3871	13	9-15	328	29	19-34	140	21	20-36	52	19	10-34	253	26	17-29	123	35	28-47	95	18	8-28	311	26	14-26
MEMORIAL HDSP YORK PA 17403	PA-132	1293	13	9-16	76	22	20-43	56	21	17-41	31	6	5-33	48	19	11-34	57	47	29-55	31	16	6-36	92	20	12-30
MEMORIAL HOSP INC TOWANDA PA 18848	PA-133	593	15	9-17	42	38	12-40	23	39	13-49	16	25	4-42	50	26	12-36	26	35	22-59	12	8	3-48	56	21	13-36
MEMORIAL HDSP OF BEDFORD C EVERETT PA 15537	PA-134	877	13	10-17	33	52	18-51	77	30	19-40	18	17	7-45	62	18	14-36	28	46	22-58	27	4	8-42	83	10	12-30
MERCY CATHDLIC MED CTR/FIT DARBY PA 19023	PA-135	4178	14	11-17	324	24	18-33	169	37	20-35	95	19	11-31	275	27	17-28	213	37	32-48	135	14	13-32	346	20	14-26
MERCY HDSP WILKES BARRE PA 18765	PA-136	2581	12	9-16	158	24	16-34	118	19	21-39	76	18	9-29	184	22	16-29	119	41	29-48	82	28	10-31	149	18	11-26
MERCY HOSPITAL ALTOONA PA 16603	PA-137	1514	13	10-17	137	36	23-42	36	36	14-43	36	25	8-36	109	23	16-32	54	46	25-51	37	24	9-37	110	11	12-29
MERCY HOSPITAL SCRANTON PA 18501	PA-138	3509	12	9-16	287	24	19-34	128	30	19-36	97	20	10-28	197	19	16-29	152	42	29-46	67	21	14-38	233	21	13-26
MERCY HOSPITAL - PITTSBURG PITTSBURGH PA 15219	PA-139	3931	9	9-15	329	22	20-35	101	23	20-38	74	11	9-29	172	20	18-31	150	29	28-46	68	22	15-39	180	18	15-29
MERCY HOSPITAL DF JOHNSTOW JOHNSTOWN PA 15905	PA-140	1398	12	8-15	68	21	12-35	38	37	17-46	41	20	7-33	67	16	13-33	45	49	25-54	37	19	8-36	147	18	12-27
METHODIST HOSPITAL PHILADELPHIA PA 19148	PA-141	2122	12	10-16	146	20	17-35	75	27	18-39	63	16	10-33	166	21	16-30	89	38	26-48	59	31	17-43	179	14	13-28
METRO HEALTH CENTER ERIE PA 16501	PA-142	788	8	8-15	36	31	13-43	33	30	15-46	11	18	3-50	47	15	12-37	21	48	23-64	15	20	4-45	67	10	10-31
METRDPOLITAN HOSP PHILADELPHIA PA 19106	PA-143	1186	20	10-17	84	35	18-40	31	26	16-48	23	30	5-38	70	19	13-33	20	70	22-63	62	32	12-36	113	38	13-30
METROPOLITAN HDSP PARKVIEW PHILADELPHIA PA 19124	PA-144	1712	16	9-16	99	34	15-35	75	20	17-38	51	35	10-34	118	25	15-31	53	43	24-50	52	29	11-36	140	26	13-28
METROPOLITAN HDSP-SPRING D SPRINGFIELD PA 19064	PA-145	854	13	1D-18	83	25	15-36	30	2D	15-47	13	31	6-51	42	19	12-37	35	46	24-56	21	19	4-38	128	25	14-30
MEYERSDALE COMMUNITY HDSP MEYERSDALE PA 15552	PA-146*	317	21	11-21	11	27	9-6D	19	26	13-52	14	43	4-45	22	45	11-47	13	46	19-68	11	64	1D-61	39	21	1D-37
MID VALLEY HOSPITAL ASSN PECKVILLE PA 18452	PA-147	469	12	8-16	19	16	12-52	19	37	13-52	11	45	6-54	23	26	8-41	25	44	21-58	14	29	6-5D	28	14	6-34
MILLCREEK COMMUNITY HOSPIT ERIE PA 165D9	PA-148	682	11	9-17	34	32	16-47	21	19	13-51	6	33	3-65	51	16	12-36	17	47	19-63	24	17	8-42	1D4	11	11-27

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
LEE HOSP JOHNSTOWN PA 15901	11	9	8-61	37	46	24-58	50	8	3-21	5	0	0-100	191	7	3-10	107	4	2-13	11	0	0-94	263	1	2-8	182	1	0-5
LEHIGH VALLEY HOSPITAL CEN ALLENTOWN PA 18105	8	13	3-61	25	32	22-60	109	7	5-18	7	0	0-100	466	6	4-9	253	4	2-10	11	0	0-64	787	3	4-8	420	1	1-4
LEWISTON HOSP LEWISTOWN PA 17044	18	22	6-49	28	39	25-62	55	7	4-23	14	0	0-98	199	5	2-9	96	8	1-13	29	0	0-52	184	5	3-10	124	4	0-7
LOCK HAVEN HOSPITAL LOCK HAVEN PA 17745	3	0	2-83	3	33	7-88	23	4	5-36	1	0	0-100	103	3	2-11	34	6	1-22	3	33	0-95	75	3	2-13	33	0	0-19
LOWER BUCKS HOSP BRISTOL PA 19007	9	11	5-61	13	23	14-63	27	11	2-27	39	3	0-28	184	7	3-10	105	6	2-13	18	6	0-61	178	2	2-9	98	1	0-8
MAGEE WOMEN'S HOSP PITTSBURGH PA 15213	1	0	0-99	.	.		.	.		.	.		36	6	1-20	17	6	0-34	75	0	0-34	2	0	0-95	5	0	0-82
MCKEESPORT HOSPITAL MCKEESPORT PA 15132	33	27	11-47	49	41	24-54	70	10	4-19	15	0	0-98	388	8	3-8	170	6	2-11	18	0	0-92	350	4	3-7	154	3	0-6
MEAOVILLE MEDICAL CENTER MEAOVILLE PA 16335	17	29	12-59	21	33	17-58	58	5	4-21	22	0	0-63	240	5	3-9	99	5	1-13	28	0	0-56	182	4	2-9	149	1	0-6
MEDICAL CENTER BEAVER PA I BEAVER PA 15009	28	29	10-49	32	47	23-58	84	11	4-18	4	0	0-100	424	5	3-9	173	0	2-11	31	0	0-48	355	5	3-8	286	2	1-5
MEMORIAL HOSP YORK PA 17403	5	40	5-74	16	25	15-61	22	5	1-29	10	0	0-99	135	6	2-11	53	6	1-17	20	5	0-52	129	4	2-10	91	2	0-8
MEMORIAL HOSP INC TOWANDA PA 18848	5	20	4-74	4	75	13-88	15	7	2-39	1	0	0-100	63	5	1-14	18	6	1-32	7	0	0-99	55	4	1-15	33	0	0-20
MEMORIAL HOSP OF BEOFORO C EVERETT PA 15537	7	29	6-69	11	73	19-73	14	7	2-41	2	0	0-100	112	6	2-11	26	4	0-27	13	0	0-100	92	5	2-12	31	0	0-25
MERCY CATHOLIC MED CTR/FIT DARBY PA 19023	32	31	10-46	70	39	28-55	64	13	3-19	11	0	0-88	357	6	3-9	211	6	2-11	40	0	0-30	275	5	3-8	194	1	0-5
MERCY HOSP WILKES BARRE PA 18765	21	33	14-57	30	40	20-55	58	3	3-19	27	0	0-71	255	4	2-9	125	3	2-12	33	0	0-40	199	5	2-8	120	6	0-7
MERCY HOSPITAL ALTOONA PA 16603	5	40	6-77	8	13	14-74	25	16	3-30	7	0	0-99	120	7	2-11	75	1	1-14	21	0	0-88	116	2	2-11	69	0	0-10
MERCY HOSPITAL SCRANTON PA 18501	19	26	10-54	48	33	21-51	76	5	3-17	32	3	0-51	313	5	2-8	102	4	2-13	30	0	0-33	530	4	3-7	192	4	0-5
MERCY HOSPITAL - PITTSBURG PITTSBURGH PA 15219	21	29	13-56	14	71	24-74	59	10	5-23	25	4	0-55	305	3	3-10	145	3	2-12	24	0	0-70	534	2	3-8	292	3	1-5
MERCY HOSPITAL OF JOHNSTOW JOHNSTOWN PA 15905	19	32	10-53	10	60	18-74	30	10	3-28	6	0	0-96	184	5	2-10	49	4	1-17	25	0	0-83	110	5	2-11	66	0	0-11
METHODIST HOSPITAL PHILADELPHIA PA 19148	14	21	8-57	12	25	16-68	48	17	4-23	8	0	0-100	192	5	3-10	111	6	2-13	15	0	0-78	229	3	2-8	87	6	1-10
METRO HEALTH CENTER ERIE PA 16501	19	0	8-51	4	0	6-81	14	7	2-39	15	0	0-95	88	3	2-14	31	3	2-25	6	0	0-100	70	3	1-13	71	1	0-11
METROPOLITAN HOSP PHILADELPHIA PA 19106	25	28	8-47	30	43	23-59	22	9	2-31	8	0	0-75	67	12	3-16	76	14	3-17	5	0	0-99	125	3	2-11	55	4	0-12
METROPOLITAN HOSP PARKVIEW PHILADELPHIA PA 19124	21	38	12-55	16	63	16-61	28	11	2-26	2	50	0-100	138	10	2-11	94	9	2-14	12	0	0-94	165	6	2-10	70	3	0-11
METROPOLITAN HOSP-SPRING G SPRINGFIELD PA 19064	7	43	5-67	2	50	6-94	9	11	3-53	1	0	0-100	70	6	2-15	46	4	1-19	1	0	0-100	98	1	2-11	56	0	0-12
MEYERSDALE COMMUNITY HOSP MEYERSDALE PA 15552	4	75	4-78	4	50	11-86	2	50	0-91	.	.		40	5	2-21	8	13	2-54	5	0	0-100	22	9	1-26	9	0	0-89
MID VALLEY HOSPITAL ASSN PECKVILLE PA 18452	2	50	1-90	4	25	9-84	11	9	1-44	.	.		69	3	1-14	19	11	1-31	.	.		64	3	1-14	21	0	0-38
MILLCREEK COMMUNITY HOSPIT ERIE PA 16509	11	9	7-59	4	50	11-87	13	15	1-40	2	0	0-100	67	6	2-15	39	5	2-21	6	0	0-72	76	3	1-12	41	2	0-17

*Written Comments Not Submitted.

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Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MINERS HOSP OF NORTH CAMBR SPANGLER PA 15775	PA-149*	654	13	10-18	17	29	14-57	7	14	8-69	16	19	4-42	43	33	13-39	51	45	27-54	17	12	6-46	84	14	13-33
MONONGAHELA VALLEY HOSPITA MONONGAHELA PA 15063	PA-150	3079	11	9-16	188	34	24-41	111	33	22-40	51	22	8-31	192	24	16-30	139	35	29-48	50	20	9-34	235	13	14-27
MONSOUR MEDICAL CENTER JEANNETTE PA 15644	PA-151	903	8	8-15	42	29	19-49	30	23	14-45	14	14	5-46	52	10	13-37	17	47	17-61	7	14	5-65	97	18	12-30
MONTEFIORE HOSPITAL PITTSBURGH PA 15213	PA-152	2929	13	10-16	278	23	17-32	98	28	19-38	78	17	10-30	152	16	18-33	135	29	32-50	65	23	11-35	223	27	15-28
MONTOGOMERY HOSP NORRISTOWN PA 19401	PA-153*	1810	12	9-15	150	28	19-37	51	20	17-42	31	16	5-33	104	20	16-33	66	47	27-52	38	16	6-33	124	20	13-29
MONTROSE GENERAL HOSP INC MONTROSE PA 18801	PA-154*	308	12	9-18	11	27	5-53	15	27	11-55	9	22	6-59	24	25	11-45	11	45	18-71	11	9	6-56	35	9	9-36
MOSES TAYLOR HOSPITAL SCRANTON PA 18510	PA-155	2179	11	9-16	151	21	14-31	84	30	19-40	54	15	9-33	140	22	15-30	92	49	27-48	46	13	7-33	151	13	13-27
MUHLENBERG MEDICAL CTR BETHLEHEM PA 18017	PA-156	1341	10	8-15	53	19	17-43	46	28	16-43	37	22	8-36	57	19	12-34	43	40	27-56	35	26	10-40	108	19	14-32
MUNCY VALLEY HOSPITAL MUNCY PA 17756	PA-157	567	10	9-17	26	15	11-45	18	33	12-52	13	38	4-48	30	23	10-39	29	31	21-56	6	17	4-67	66	9	12-34
NANTICOKE STATE GENERAL HO NANTICOKE PA 18634	PA-158	568	13	8-16	21	33	11-48	25	16	14-49	7	0	3-60	45	33	11-36	26	62	20-56	14	21	5-48	41	20	10-35
NASON HOSP ROARING SPRINGS PA 16673	PA-159	724	14	9-16	38	18	11-40	33	24	16-48	22	9	7-42	30	33	10-40	45	36	21-49	11	9	5-54	57	33	14-37
NAZARETH HOSP PHILADELPHIA PA 19152	PA-160	3549	12	10-16	237	38	22-38	153	22	20-36	58	17	10-34	206	21	17-30	193	29	30-46	72	24	10-32	216	17	15-29
NESBITT MEMORIAL HOSPITAL KINGSTON PA 18704	PA-161	2224	11	8-14	122	15	13-32	101	25	18-37	64	8	9-30	177	25	15-28	85	41	27-49	48	19	8-34	167	13	11-25
NORTH HILLS PASSAVANT HOSP PITTSBURGH PA 15237	PA-162	3189	11	10-16	215	28	20-36	117	26	21-39	60	8	9-31	182	21	16-30	153	34	32-50	43	23	8-35	300	18	14-26
NORTH PENN HOSP LANSOALE PA 19446	PA-163	1320	14	10-17	92	29	17-38	61	34	19-43	21	29	6-41	69	19	15-35	60	38	27-52	22	23	7-43	115	30	15-32
NORTHEASTERN HOSP PHILADELPHIA PA 19134	PA-164	1907	10	9-15	145	23	17-35	75	20	16-37	29	24	11-44	111	22	14-30	92	29	27-48	37	16	6-33	170	21	12-27
OHIO VALLEY GENERAL HOSPIT MCKEES ROCKS PA 15136	PA-165*	1352	12	9-16	70	34	15-38	42	26	16-44	36	17	8-36	102	25	16-33	43	40	26-56	22	18	8-44	135	19	14-29
OIL CITY AREA HLTH CNTR IN OIL CITY PA 16301	PA-166	1088	11	9-16	57	42	20-46	33	30	16-47	32	28	6-35	53	21	12-34	41	37	23-53	26	15	10-44	106	11	10-26
OXFORD HOSPIAL PHILADELPHIA PA 19111	PA-167*	63	19	5-23	2	0	1-89	1	0	0-97	2	0	0-91	2	50	1-89	3	33	4-85	2	0	2-90	9	11	4-55
PALMERTON HOSP PALMERTON PA 18071	PA-168	732	11	9-16	50	28	14-40	21	48	13-51	20	10	6-41	51	25	12-36	29	34	23-58	11	18	8-59	69	13	12-33
PAOLI MEMORIAL HOSP PAOLI PA 19301	PA-169	1489	11	8-15	92	22	14-35	56	39	16-40	52	17	9-33	49	18	13-37	56	48	27-53	42	26	13-42	74	16	12-33
PENNSYLVANIA HOSP PHILADELPHIA PA 19107	PA-170*	2889	7	8-14	392	20	19-34	57	28	18-43	40	3	9-35	98	13	15-33	54	30	26-53	37	16	10-40	120	22	15-32
PHILIPSBURG STATE GENERAL PHILIPSBURG PA 16866	PA-171*	834	12	9-17	47	17	14-41	24	29	14-50	12	25	3-47	58	24	14-36	53	28	25-52	20	30	6-43	62	8	11-32
PHOENIXVILLE HOSP PHOENIXVILLE PA 19460	PA-172*	1593	10	9-16	121	30	17-36	60	18	19-43	26	23	8-41	90	31	16-35	51	33	27-54	37	8	8-36	144	13	12-28
POCONO HOSP EAST STROUDSBURG PA 18301	PA-173	2162	11	10-16	143	25	16-34	117	15	20-38	54	15	10-33	128	20	16-31	97	34	28-49	37	24	13-44	201	16	14-28
PODIATRY HOSP OF PITTSBURG PITTSBURGH PA 15206	PA-174*	141	0	0-47	.	.		.			.	.		.	.		.	.		.	.		.	.	

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
MINERS HOSP OF NORTH CAMBR SPANGLER PA 15775	3	67	6-88	7	29	14-78	11	0	2-47	.	.		57	2	1-14	34	0	1-22	2	0	0-100	100	4	2-11	16	6	0-38
MONONGAHELA VALLEY HOSPITA MONONGAHELA PA 15063	17	18	11-57	29	41	20-57	35	6	4-27	19	0	0-81	345	3	3-9	109	5	2-13	22	5	0-85	340	4	3-8	226	0	0-5
MONSOUR MEOICAL CENTER JEANNETTE PA 15644	2	0	2-90	3	33	6-87	8	13	1-54	.	.		95	2	2-13	25	0	1-26	4	0	0-100	130	2	2-10	51	0	0-14
MONTEFIORE HOSPITAL PITTSBURGH PA 15213	16	50	12-59	53	60	25-54	56	23	3-19	27	0	0-59	214	3	3-10	148	9	3-13	7	0	0-98	199	4	2-9	259	1	0-5
MONTOGOMERY HOSP NORRISTOWN PA 19401	17	0	5-48	17	47	15-60	40	5	2-21	25	0	0-57	136	9	4-13	87	10	3-15	12	0	0-100	182	7	2-9	160	1	0-6
MONTROSE GENERAL HOSP INC MONTROSE PA 18801	1	0	1-97	1	0	1-98	11	9	1-44	1	0	0-100	40	5	1-19	9	11	0-52	1	0	0-100	18	6	1-31	17	12	0-39
MOSES TAYLOR HOSPITAL SCRANTON PA 18510	41	44	15-50	36	25	21-55	51	6	5-23	17	0	0-84	244	3	3-9	94	2	1-13	16	6	0-77	177	5	2-9	130	0	0-6
MUHLENBERG MEDICAL CTR BETHLEHEM PA 18017	9	67	6-63	13	31	12-61	28	0	2-26	24	0	0-55	129	9	2-11	51	4	2-19	1	0	0-100	99	3	2-11	119	3	0-7
MUNCY VALLEY HOSPITAL MUNCY PA 17756	9	33	8-65	2	0	3-91	2	0	0-95	.	.		68	7	2-16	22	18	1-29	5	0	0-100	78	1	2-12	19	0	0-48
NANTICOKE STATE GENERAL HO NANTICOKE PA 18634	.	.		3	0	3-83	11	9	1-44	.	.		52	10	1-15	35	9	2-24	5	0	0-100	52	6	1-14	25	0	0-29
NASON HOSP ROARING SPRINGS PA 16673	8	38	6-65	5	60	8-77	22	23	4-34	11	0	0-96	70	6	2-14	52	2	1-17	4	0	0-100	72	4	1-12	44	2	0-15
NAZARETH HOSP PHILAOELPHIA PA 19152	24	29	12-53	46	30	24-55	100	10	3-16	82	0	0-10	305	4	3-10	117	3	2-14	24	0	0-84	447	5	3-7	258	1	0-5
NESBITT MEMORIAL HOSPITAL KINGSTON PA 18704	13	38	7-56	17	35	14-59	59	2	3-19	27	0	0-68	186	4	2-9	120	5	2-13	27	0	0-78	187	4	2-8	117	2	0-7
NORTH HILLS PASSAVANT HOSP PITTSBURGH PA 15237	15	27	16-65	15	27	18-65	92	11	4-18	23	0	0-52	374	3	3-9	112	3	2-13	30	0	0-46	232	4	3-9	194	2	1-6
NORTH PENN HOSP LANSOALE PA 19446	11	18	6-59	13	46	20-71	33	9	4-27	62	2	0-16	124	7	3-12	56	7	2-17	11	0	0-100	90	9	2-12	77	0	0-10
NORTHEASTERN HOSP PHILAOELPHIA PA 19134	11	45	7-59	9	22	12-69	40	10	3-24	24	0	0-68	156	4	2-10	83	0	1-13	10	0	0-100	216	3	2-9	78	0	0-9
OHIO VALLEY GENERAL HOSPIT MCKEES ROCKS PA 15136	15	27	9-57	6	0	9-75	27	11	3-28	9	0	0-100	182	3	2-10	43	2	2-21	16	0	0-98	141	4	2-9	58	3	0-12
OIL CITY AREA HLTH CNTR IN OIL CITY PA 16301	12	25	12-64	19	37	18-61	19	16	2-33	2	50	0-99	111	5	2-12	51	2	1-17	14	7	0-90	90	0	2-12	60	0	0-12
OXFORO HOSPIAL PHILAOELPHIA PA 19111	1	0	0-98	3	67	4-85	.	.		.	.		2	0	0-100	3	0	0-99	.	.		7	14	0-65	7	14	0-91
PALMERTON HOSP PALMERTON PA 18071	2	50	1-90	5	40	9-79	12	0	1-42	1	0	0-100	83	4	2-13	52	2	1-18	24	0	0-72	69	6	1-13	24	0	1-25
PAOLI MEMORIAL HOSP PAOLI PA 19301	7	14	7-69	19	11	17-60	44	7	3-22	8	13	0-100	122	4	2-10	69	1	1-15	11	0	0-100	116	5	2-10	126	2	0-7
PENNSYLVANIA HOSP PHILAOELPHIA PA 19107	23	26	12-54	20	60	19-61	48	6	3-22	37	0	0-34	169	2	3-10	239	2	1-10	44	0	0-24	175	1	2-9	511	0	0-3
PHILIPSBURG STATE GENERAL PHILIPSBURG PA 16866	11	18	7-60	13	46	12-61	18	11	3-36	2	0	0-100	97	4	2-12	30	0	1-23	11	0	0-99	84	6	2-12	59	2	0-13
PHOENIXVILLE HOSP PHOENIXVILLE PA 19460	12	25	4-53	14	14	15-63	48	6	3-22	9	0	0-97	158	3	3-11	97	1	2-14	16	0	0-97	145	4	3-11	102	2	1-8
POCONO HOSP EAST STROUOSBURG PA 18301	11	9	5-56	15	53	18-65	65	8	3-19	15	0	0-98	189	4	2-10	130	9	2-13	20	0	0-79	173	5	3-10	98	1	0-8
POOIATRY HOSP OF PITTSBURG PITTSBURGH PA 15206	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		129	0	0-9

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
POLYCLINIC MEDICAL CENTER HARRISBURG PA 17105	PA-175*	2747	10	8-14	208	21	15-31	83	30	17-37	74	14	10-31	160	18	16-31	94	34	25-46	50	26	8-33	165	18	14-28
POTTSTOWN MEM MED CTR POTTSTOWN PA 19464	PA-176	2146	14	8-15	175	38	17-34	88	34	19-38	41	20	8-33	109	36	17-34	58	43	26-52	45	11	10-37	160	26	13-28
POTTSVILLE HOSP WARNE CLI POTTSVILLE PA 17901	PA-177*	1780	13	9-15	108	28	14-34	67	33	18-40	37	11	7-34	150	31	14-28	97	29	27-48	40	25	9-36	159	18	12-26
PRESB-UNIV OF PA MED CTR PHILADELPHIA PA 19104	PA-178	2555	10	8-15	157	31	23-41	53	25	16-41	42	19	9-34	159	10	16-30	56	34	26-52	59	14	10-35	143	15	14-30
PRESBYTERIAN-UNIVERSITY HO PITTSBURGH PA 15213	PA-179	3516	9	8-14	321	21	19-34	98	37	18-37	75	11	9-29	131	18	17-33	96	21	25-46	39	13	6-32	169	19	14-29
PUNXSUTAWNEY AREA HOSP INC PUNXSUTAWNEY PA 15767	PA-180	511	17	12-21	28	25	13-47	23	35	15-52	9	0	4-56	39	21	16-44	32	53	29-63	10	40	9-62	76	24	12-32
QUAKERTOWN HOSP ASSN QUAKERTOWN PA 18951	PA-181	842	13	9-16	44	18	14-41	29	31	16-49	17	18	6-45	64	19	14-35	39	54	23-54	15	20	5-46	70	24	10-30
READING HOSPITAL MED CTR READING PA 19603	PA-182	6102	10	8-14	508	22	16-29	245	24	21-34	117	14	12-30	325	17	17-27	273	30	31-45	56	20	12-38	354	19	14-25
RIDDLE MEM HOSP MEDIA PA 19063	PA-183	2121	12	9-16	117	21	15-34	106	25	19-37	34	9	7-36	122	32	16-32	82	27	28-51	80	20	8-30	191	26	14-28
ROBERT PACKER HOSP SAYRE PA 18840	PA-184	3081	8	7-14	267	21	20-35	81	23	19-40	58	2	10-33	102	15	15-32	68	32	25-49	23	26	8-43	168	18	14-28
ROLLING HILL HOSP/DIAGNOST ELKINS PARK PA 19117	PA-185	1956	9	9-15	167	16	18-35	46	22	18-45	22	9	6-40	88	19	15-34	65	35	28-53	37	24	11-40	131	17	15-32
ROXBOROUGH MEM HOSP PHILADELPHIA PA 19128	PA-186	1660	11	10-17	110	20	19-39	85	24	19-40	52	15	12-37	127	18	15-31	56	32	23-49	34	6	9-38	187	17	12-26
SACRED HEART HOSP CHESTER PA 19013	PA-187	1337	12	8-15	84	30	15-37	41	24	16-44	23	22	4-36	82	24	15-35	55	44	25-51	43	21	7-33	144	17	12-27
SACRED HEART HOSP NORRISTOWN PA 19401	PA-188	1826	10	8-15	99	26	19-39	61	36	18-41	27	19	7-39	123	15	14-30	65	38	26-51	42	5	7-33	152	10	12-27
SACRED HEART HOSPITAL ALLENTOWN PA 18102	PA-189	2012	11	9-16	200	25	15-32	67	28	17-39	54	17	10-33	115	11	15-31	79	39	30-53	42	17	9-37	120	15	14-30
SAINT VINCENT HEALTH CENTE ERIE PA 16544	PA-190	4183	11	8-14	281	25	19-35	126	33	21-38	87	17	11-30	193	23	16-29	134	37	27-45	57	21	8-31	350	16	15-26
SCRANTON STATE GNRL HOSP SCRANTON PA 18501	PA-191	504	15	10-18	17	24	11-53	19	21	14-54	15	27	7-49	50	36	11-34	19	53	17-59	7	14	1-59	63	16	13-34
SEIOLE MEM HOSP MECHANICSBURG PA 17055	PA-192	190	11	8-20	4	25	4-77	11	36	13-65	3	33	0-87	12	17	5-49	13	8	16-65	3	33	0-84	23	22	8-41
SEWICKLEY VALLEY HOSPITAL SEWICKLEY PA 15143	PA-193	2346	11	9-15	168	23	15-32	71	31	18-40	49	8	6-29	147	21	15-30	106	42	27-47	31	16	9-40	243	18	13-26
SHADYSIDE HOSPITAL PITTSBURGH PA 15232	PA-194	4482	10	8-15	293	24	19-34	115	19	20-38	79	11	9-29	215	22	18-30	168	39	28-45	66	24	14-38	353	11	12-23
SHAMOKIN STATE GENERAL HOS SHAMOKIN PA 17872	PA-195*	816	15	10-18	40	45	15-45	29	41	15-48	12	17	5-52	59	17	13-35	55	33	27-54	21	24	8-44	82	21	12-31
SHARON GENERAL HOSPITAL SHARON PA 16146	PA-196	1914	10	10-16	139	27	19-38	59	27	20-44	30	20	9-40	114	22	15-31	77	36	28-51	51	16	13-40	161	15	13-28
SHENANGO VALLEY MEDICAL CN FARRELL PA 16121	PA-197	997	11	9-16	44	50	23-53	27	33	15-49	18	28	7-46	48	27	12-36	18	44	17-59	23	13	5-39	151	9	11-25
SOLDIERS SAILORS MEMORIA WELLSBORO PA 16901	PA-198*	987	13	8-15	50	46	15-42	39	31	15-43	18	22	5-42	49	31	14-39	33	42	22-55	16	19	6-47	86	22	10-28
SOMERSET COMMUNITY HOSPITA SOMERSET PA 15501	PA-199	1268	11	8-15	54	24	13-38	36	25	12-40	21	24	9-45	62	26	14-35	52	40	26-53	28	29	10-43	131	20	13-29
SOUTH SIDE HOSP PITTSBURG PA 15203	PA-200*	2093	13	8-15	130	33	17-36	63	43	17-40	21	24	9-45	156	28	16-30	69	41	26-50	50	22	8-33	146	16	14-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
POLYCLINIC MEDICAL CENTER HARRISBURG PA 17105	15	27	8-55	31	35	23-59	37	24	3-24	33	0	0-64	288	6	3-9	61	3	1-16	13	0	0-60	299	8	2-7	154	1	0-6
POTTSTOWN MEM MED CTR POTTSTOWN PA 19464	12	33	7-58	14	21	16-65	55	9	4-22	5	0	0-100	194	9	3-11	78	3	1-14	19	0	0-88	153	6	2-9	252	2	0-5
POTTSVILLE HOSP WARNE CLI POTTSVILLE PA 17901	8	0	5-64	8	50	13-73	36	11	5-28	8	0	0-100	149	5	2-10	63	10	1-16	8	0	0-100	162	6	2-9	71	1	0-10
PRESB-UNIV OF PA MED CTR PHILADELPHIA PA 19104	9	22	8-66	26	38	22-61	27	15	3-29	221	0	0-3	150	6	4-13	108	11	3-16	4	0	0-100	513	10	4-8	72	0	0-10
*PRESBYTERIAN-UNIVERSITY HO PITTSBURGH PA 15213	107	8	3-31	19	47	23-67	48	8	3-21	4	0	0-100	266	4	3-10	112	3	1-12	5	0	0-100	286	9	3-8	382	1	0-4
PUNXSUTAWNEY AREA HOSP INC PUNXSUTAWNEY PA 15767	4	25	5-80	8	50	16-76	18	6	1-33	.	.		67	3	1-14	25	8	1-26	2	0	0-100	29	0	2-24	18	0	0-31
QUAKERTOWN HOSP ASSN QUAKERTOWN PA 18951	6	17	6-71	7	43	8-70	19	11	4-36	2	0	0-100	88	7	2-13	51	10	2-18	7	0	0-100	71	4	2-14	56	4	0-13
READING HOSPITAL MED CTR READING PA 19603	29	28	10-47	89	25	25-50	131	8	4-15	165	1	0-5	559	6	3-8	240	5	1-10	60	0	0-31	670	4	3-7	565	1	0-3
RIDDLE MEM HOSP MEDIA PA 19063	10	60	10-66	44	36	21-52	74	5	3-17	14	0	0-90	221	3	3-10	145	3	2-12	18	0	0-39	126	6	2-10	158	3	0-6
ROBERT PACKER HOSP SAYRE PA 18840	23	9	6-45	12	33	13-64	58	9	3-20	61	0	0-19	216	3	2-9	118	2	1-12	21	0	0-98	550	5	3-8	312	1	0-4
ROLLING HILL HOSP/DIAGNOST ELKINS PARK PA 19117	19	11	12-56	14	36	16-64	25	4	2-27	130	0	0-6	179	5	3-11	129	5	2-13	20	0	0-52	212	2	3-9	116	2	0-7
ROXBOROUGH MEM HOSP PHILADELPHIA PA 19128	16	6	9-55	28	39	22-59	39	5	2-22	14	0	0-85	159	7	3-11	88	3	2-14	22	0	0-69	136	3	2-10	62	2	0-11
SACRED HEART HOSP CHESTER PA 19013	17	35	9-54	13	46	12-60	11	9	1-44	.	.		112	3	2-11	72	4	1-14	9	0	0-100	105	7	2-11	38	0	0-17
SACRED HEART HOSP NORRISTOWN PA 19401	12	8	5-55	8	38	10-69	19	11	2-33	17	0	0-69	190	8	3-10	66	5	1-15	17	0	0-75	183	3	2-8	110	4	0-7
SACRED HEART HOSPITAL ALLENTOWN PA 18102	9	11	6-63	25	32	18-56	42	7	4-24	69	1	0-14	205	3	2-9	55	4	1-17	18	0	0-91	167	4	2-9	121	0	0-7
SAINT VINCENT HEALTH CENTE ERIE PA 16544	27	22	9-47	38	39	24-57	102	12	4-16	61	2	0-15	403	6	3-8	170	4	1-10	24	0	0-34	416	6	3-8	262	1	0-5
SCRANTON STATE GNRL HOSP SCRANTON PA 18501	14	36	9-58	4	25	6-81	16	6	3-38	1	0	0-100	48	13	3-19	19	5	0-33	1	0	0-100	40	5	1-18	26	4	0-26
SEIDLE MEM HOSP MECHANICSBURG PA 17055	1	100	2-98	4	25	7-82	.	.		5	0	0-100	14	0	0-37	3	0	0-82				20	5	1-29	13	0	0-63
SEWICKLEY VALLEY HOSPITAL SEWICKLEY PA 15143	26	23	13-52	14	57	17-66	30	7	1-24	36	0	0-42	177	6	2-10	92	3	1-13	22	0	0-95	153	10	2-9	217	2	0-5
SHADYSIDE HOSPITAL PITTSBURGH PA 15232	26	27	13-52	30	40	23-60	67	16	5-21	36	0	0-30	344	3	3-9	143	4	1-11	40	0	0-29	925	6	4-7	268	3	1-5
SHAMOKIN STATE GENERAL HOS SHAMOKIN PA 17872	10	40	11-68	9	22	14-72	25	12	2-28	8	0	0-100	80	5	2-15	48	4	1-18	4	0	0-100	126	3	2-11	26	4	0-42
SHARON GENERAL HOSPITAL SHARON PA 16146	13	15	9-59	11	9	18-72	44	9	6-27	4	0	0-100	206	3	3-10	136	3	2-12	15	0	0-61	160	3	2-9	106	1	0-7
SHENANGO VALLEY MEDICAL CN FARRELL PA 16121	15	33	12-60	10	30	14-70	13	0	2-41	.	.		99	9	3-14	45	4	1-18	8	0	0-99	131	2	2-10	61	2	0-12
SOLDIERS SAILORS MEMORIA WELLSBORO PA 16901	12	33	6-56	3	33	4-85	33	15	2-24	7	0	0-100	140	5	2-10	35	11	2-23	8	0	0-100	66	3	1-13	55	2	0-14
SOMERSET COMMUNITY HOSPITA SOMERSET PA 15501	6	0	2-66	9	11	13-71	35	6	3-26	21	0	0-84	130	5	2-10	42	7	1-19	10	0	0-100	137	4	2-11	49	2	0-14
SOUTH SIDE HOSP PITTSBURG PA 15203	15	33	8-55	17	41	18-64	22	32	4-35	40	0	0-30	206	6	3-10	72	4	2-16	9	11	0-81	154	6	2-10	262	2	1-5

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																										
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease									
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent						
SOUTHERN CHESTER CTY MED C WEST GROVE PA 19390	PA-201*	758	10	9-17	42	12	12-40	31	23	18-50	11	36	5-53	62	11	13-34	19	58	21-63	23	13	10-46	87	18	12-31						
SPENCER HOSPITAL MEADVILLE PA 16335	PA-202*	6	17	0-63	.	.		.	.		.	.		.	.		.	.		2	0	0-92	1	100	0-98						
ST AGNES MED CNTR PHILADELPHIA PA 19145	PA-203	1863	13	10-17	127	26	20-39	64	44	17-40	32	13	7-36	138	19	16-31	77	45	28-51	38	24	10-39	166	14	14-28						
ST CLAIR MEM HOSP PITTSBURGH PA 15243	PA-204*	3760	12	10-16	269	22	15-31	135	30	22-38	100	17	12-31	222	28	19-32	140	41	30-48	76	20	11-33	383	20	15-26						
ST FRANCIS HOSPITAL OF NEW NEW CASTLE PA 16101	PA-205*	1327	11	8-14	62	40	20-46	24	38	13-48	26	19	8-41	63	24	14-35	45	36	27-56	21	10	4-39	130	20	12-28						
ST FRANCIS MEDICAL CNTR PITTSBURGH PA 15201	PA-206	3429	10	8-14	223	28	18-34	69	29	18-40	54	13	7-30	165	22	18-32	112	35	29-48	46	13	9-36	224	19	16-29						
ST JOHNS HEALTH AND HOSPIT PITTSBURGH PA 15212	PA-207	573	8	5-13	19	16	14-55	14	29	11-56	10	20	4-54	24	13	9-42	12	33	12-61	10	20	2-50	37	22	8-33						
ST JOSEPH HOSP CARBONDALE PA 18407	PA-208	857	12	8-16	52	33	19-46	24	33	14-49	18	28	10-50	53	23	12-35	28	29	22-58	20	35	5-41	54	17	10-32						
ST JOSEPH HOSPITAL LANCASTER PA 17604	PA-209*	2570	10	8-14	222	22	17-33	60	40	20-44	48	13	8-32	131	21	15-31	85	38	28-50	28	11	9-41	202	17	13-26						
ST JOSEPHS HOSP PHILADELPHIA PA 19130	PA-210	940	14	9-16	47	30	10-36	70	19	16-37	15	47	5-45	66	11	12-32	35	23	21-53	55	27	10-35	64	27	12-33						
ST JOSEPHS HOSP READING PA 19603	PA-211	2384	13	9-16	216	32	19-35	94	36	20-39	76	16	8-28	133	23	16-32	82	49	28-50	77	26	10-33	142	18	14-29						
ST LUKES HOSPITAL OF BETHL BETHLEHEM PA 18015	PA-212*	3550	12	9-16	329	27	19-34	136	26	20-37	63	19	9-31	183	19	16-30	138	33	28-46	55	20	10-34	199	21	14-27						
ST MARGARET MEM HOSP PITTSBURGH PA 15215	PA-213	2708	9	7-14	160	27	17-35	68	25	17-39	48	21	10-35	140	17	17-32	105	33	29-49	33	33	16-49	133	12	12-28						
ST MARY HOSP PHILADELPHIA PA 19125	PA-214*	846	11	8-16	51	29	12-38	32	25	14-45	31	16	7-35	58	17	12-33	30	43	23-58	22	14	7-42	84	15	10-29						
ST MARY S HOSPITAL INC LANGHORNE PA 19047	PA-215	1762	14	10-17	113	25	17-37	86	23	21-41	52	23	9-33	106	25	16-33	64	55	28-53	32	25	10-41	131	19	14-30						
SUBURBAN GENERAL HOSP PITTSBURGH PA 15212	PA-216*	2028	11	9-16	123	21	16-35	78	35	21-42	44	9	11-37	112	22	16-33	88	38	30-51	30	13	5-35	157	18	13-28						
SUBURBAN GNRL HOSP NORRISTOWN PA 19401	PA-217	933	13	9-16	56	25	18-44	21	24	16-54	14	29	8-52	63	11	13-34	32	41	22-55	29	10	6-37	61	23	12-33						
SUNBURY COMMUNITY HOSP SUNBURY PA 17801	PA-218*	1089	13	9-16	37	38	19-50	37	35	17-47	12	17	3-47	53	36	16-40	46	37	28-57	31	23	8-39	123	22	14-31						
TAYLOR HOSP RIDLEY PARK PA 19078	PA-219	1857	11	9-16	132	22	14-33	70	24	16-38	43	14	10-36	112	25	15-32	57	46	26-52	53	19	10-36	142	20	14-30						
TEMPLE UNIVERSITY HOSP PHILADELPHIA PA 19140	PA-220	2065	10	8-15	175	16	18-35	72	26	17-39	51	14	8-32	112	15	15-31	47	32	23-51	58	21	13-38	131	21	11-26						
THE GETTYSBURG HOSPITAL GETTYSBURG PA 17325	PA-221	1083	13	10-17	89	20	15-36	55	27	19-43	33	24	6-34	76	16	16-36	45	42	27-56	17	24	6-45	98	23	14-32						
THOMAS JEFFERSON UNIV HOSP PHILADELPHIA PA 19107	PA-222	3358	9	8-15	418	22	20-34	47	13	18-44	51	12	10-34	96	20	15-33	82	33	28-50	38	24	12-42	155	18	16-31						
TITUSVILLE HOSP TITUSVILLE PA 16354	PA-223*	589	12	9-18	40	35	15-45	20	15	12-50	14	29	4-46	34	24	12-40	23	17	19-57	9	11	4-57	83	18	12-30						
TROY COMMUNITY HOSP INC TROY PA 16947	PA-224	276	16	10-20	12	33	11-61	11	36	13-64	7	0	1-58	15	33	8-50	7	86	14-77	8	13	3-58	51	12	11-34						
TYLER MEMORIAL HOSP TUNKHANNOCK PA 18657	PA-225	713	11	8-16	22	32	13-51	25	36	13-48	17	12	6-45	38	18	12-39	25	12	17-53	16	38	4-44	91	21	12-30						
TYRONE HOSP TYRONE PA 16686	PA-226*	412	11	7-15	14	36	11-57	9	44	11-67	6	17	2-63	33	27	9-37	11	45	16-68	9	11	2-53	42	10	9-34						

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SOUTHERN CHESTER CTY MED C WEST GROVE PA 19390	6	17	5-71	6	33	13-80	14	14	2-40	3	0	0-100	77	3	2-13	23	4	1-28	1	0	0-100	78	3	2-12	45	2	0-16
SPENCER HOSPITAL MEADVILLE PA 16335	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
ST AGNES MED CNTR PHILADELPHIA PA 19145	19	32	10-54	17	53	19-65	37	32	3-25	18	0	0-69	132	5	2-11	71	8	2-15	4	0	0-89	237	4	2-8	81	2	0-9
ST CLAIR MEM HOSP PITTSBURGH PA 15243	30	23	13-51	34	53	23-57	127	9	5-17	31	0	0-57	423	4	3-9	149	3	2-11	36	0	0-69	276	5	3-8	262	1	1-5
ST FRANCIS HDSPITAL OF NEW NEW CASTLE PA 16101	11	64	13-68	9	44	9-65	13	8	1-40	1	0	0-100	125	6	2-11	55	5	1-17	12	0	0-100	138	2	2-9	76	0	0-10
ST FRANCIS MEDICAL CNTR PITTSBURGH PA 15201	33	18	8-44	40	33	25-58	31	3	2-26	32	0	0-47	209	4	2-9	104	4	3-15	19	0	0-36	424	6	3-7	267	1	0-4
ST JOHNS HEALTH AND HOSPIT PITTSBURGH PA 15212	2	0	0-92	3	33	5-86	9	0	1-50	.	.		37	3	1-20	25	16	1-26	5	0	0-100	26	4	1-23	26	0	0-28
ST JOSEPH HDSP CARBONDALE PA 18407	7	29	4-65	18	17	16-60	15	0	1-37	9	0	0-94	95	7	2-13	30	7	0-24	4	0	0-100	69	6	1-13	74	1	0-10
ST JOSEPH HDSPITAL LANCASTER PA 17604	17	35	8-53	24	46	20-59	70	11	4-20	10	0	0-99	233	7	3-10	115	2	1-12	27	0	0-81	171	4	2-9	251	1	0-5
ST JOSEPHS HDSP PHILADELPHIA PA 19130	5	40	4-74	13	85	21-72	23	4	2-29	1	0	0-100	76	5	1-12	47	13	2-19	4	0	0-100	99	6	1-11	60	0	0-16
ST JOSEPHS HOSP READING PA 19603	25	20	4-42	19	42	20-64	90	7	4-17	29	0	0-62	247	6	3-10	102	5	1-13	16	0	0-92	176	5	2-9	185	0	0-5
ST LUKES HOSPITAL OF BETHL BETHLEHEM PA 18015	21	33	12-55	32	31	22-57	62	8	5-22	18	0	0-76	342	6	4-10	208	3	2-11	35	0	0-25	420	6	3-7	189	1	0-5
ST MARGARET MEM HOSP PITTSBURGH PA 15215	14	14	4-50	18	44	15-58	40	5	3-23	36	3	0-45	207	4	3-10	96	5	2-14	25	0	0-70	200	3	2-9	589	0	1-3
ST MARY HOSP PHILADELPHIA PA 19125	8	38	3-60	8	25	14-74	18	11	1-33	.	.		84	4	2-14	50	2	1-17	7	0	0-99	97	4	2-11	26	4	0-43
ST MARY S HOSPITAL INC LANGHORNE PA 19047	20	25	12-56	33	21	18-53	43	9	3-23	9	0	0-97	146	6	2-11	92	9	1-13	23	0	0-77	151	3	2-9	80	0	0-9
SUBURBAN GENERAL HOSP PITTSBURGH PA 15212	11	27	9-62	15	27	19-67	48	8	3-22	7	0	0-99	214	4	3-10	79	6	1-14	16	0	0-98	167	5	3-10	157	1	1-6
SUBURBAN GNRL HOSP NORRISTOWN PA 19401	8	25	7-66	8	50	13-73	17	6	3-37	12	0	0-94	94	7	2-13	68	15	3-18	11	0	0-95	111	6	3-13	56	2	0-12
SUNBURY COMMUNITY HOSP SUNBURY PA 17801	8	25	6-65	7	43	16-79	25	12	2-28	4	0	0-100	120	6	2-11	57	2	1-16	9	0	0-92	108	6	2-12	79	1	0-10
TAYLOR HOSP RIDLEY PARK PA 19078	15	33	10-57	15	13	18-65	38	8	3-23	9	0	0-95	197	5	3-10	93	10	1-13	13	0	0-96	157	2	2-9	157	1	1-7
TEMPLE UNIVERSITY HOSP PHILADELPHIA PA 19140	18	22	6-49	18	83	25-70	21	24	2-31	26	0	0-48	119	8	2-11	73	1	2-15	8	0	0-88	221	5	2-9	159	2	0-6
THE GETTYSBURG HOSPITAL GETTYSBURG PA 17325	9	11	6-63	8	25	9-69	34	12	3-25	14	7	0-91	117	7	2-10	61	5	1-15	10	0	0-98	79	6	1-12	45	0	0-21
THOMAS JEFFERSON UNIV HOSP PHILADELPHIA PA 19107	46	13	6-38	17	24	18-63	36	14	4-26	9	0	0-94	220	6	4-11	121	4	2-13	41	0	0-24	517	5	3-8	253	0	0-5
TITUSVILLE HOSP TITUSVILLE PA 16354	10	30	6-60	2	0	2-90	10	10	2-48	2	0	0-100	73	5	3-16	25	8	3-31	4	0	0-100	59	3	1-14	31	3	0-24
TROY COMMUNITY HOSP INC TROY PA 16947	2	50	7-96	2	50	3-91	4	0	0-81	.	.		29	10	3-26	10	10	1-47	.	.		16	6	0-34	13	8	0-53
TYLER MEMORIAL HOSP TUNKHANNOCK PA 18657	7	14	4-65	7	29	10-73	21	10	3-33	4	0	0-100	85	2	2-12	8	13	1-54	6	0	0-99	89	3	2-12	32	0	0-20
TYRONE HOSP TYRONE PA 16686	1	0	1-97	1	100	1-97	6	0	0-69	.	.		54	6	2-16	26	8	0-26	9	0	0-100	52	10	1-15	20	5	0-31

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
UNION CITY MEMORIAL HOSP UNION CITY PA 16438	PA-227	257	11	7-17	4	50	6-81	9	33	8-62	8	0	3-57	17	29	9-48	5	80	10-80	2	0	0-92	44	9	10-34
UNIONTOWN HOSP UNIONTOWN PA 15401	PA-228	2792	15	10-16	162	31	16-33	92	34	20-40	61	21	9-31	193	24	17-30	117	48	28-47	70	29	10-33	280	23	14-26
UNITED COMMUNITY HOSP GROVE CITY PA 16127	PA-229	1004	12	9-17	71	24	15-38	39	31	20-49	24	17	5-37	59	22	15-37	46	37	23-51	33	9	6-35	111	18	14-31
UNIVERSITY HOSP MILTON HER HERSHEY PA 17033	PA-230	2062	10	9-15	244	22	19-35	51	25	18-43	33	9	8-36	67	18	14-35	77	42	26-48	30	20	8-39	107	19	13-30
UNIVERSITY MEDICAL CTR PHILADELPHIA PA 19147	PA-231*	183	7	5-16	5	0	1-68	4	0	6-80	1	0	0-97	7	14	6-66	1	0	1-97	.	.		13	15	8-53
VALLEY FORGE MED CTR HOS NORRISTOWN PA 19401	PA-232*	26	0	1-26	.	.		1	0	0-97	.	.		.	.		.	.		.	.		2	0	1-89
W ALLEGHENY HDSP OAKDALE PA 15071	PA-233*	152	13	5-16	2	50	0-90	6	33	8-73	3	33	1-81	7	14	4-62	3	33	4-84	2	50	1-89	17	29	5-42
WARMINSTER GENERAL HOSP WARMINSTER PA 18974	PA-234	1122	13	9-17	50	40	17-44	46	35	18-44	33	21	9-38	75	24	15-34	45	29	27-56	30	20	7-37	112	29	12-29
WARREN GENERAL HOSP WARREN PA 16365	PA-235	1250	11	9-16	87	22	17-39	51	20	19-45	27	19	8-39	85	20	14-33	42	38	26-56	33	9	7-37	98	15	11-29
WASHINGTON HDSPITAL WASHINGTON PA 15301	PA-236	3601	12	9-16	213	27	18-34	115	24	20-37	75	28	11-31	225	20	16-29	129	34	30-48	88	20	12-34	407	19	15-26
WAYNE COUNTY MEMORIAL HOSP HONESDALE PA 18431	PA-237	885	15	10-17	47	47	18-46	40	33	16-44	15	20	3-43	53	25	12-35	48	35	22-50	17	18	4-42	97	19	12-30
WAYNESBORO HOSP WAYNESBORO PA 17268	PA-238	761	14	10-17	54	26	13-38	30	13	16-49	16	13	3-40	49	20	13-37	36	36	24-56	22	14	4-38	58	40	13-35
WEST PARK HDSP PHILADELPHIA PA 19131	PA-239	956	12	10-17	60	17	12-35	34	12	16-46	22	23	7-42	59	14	15-37	44	32	28-58	15	13	5-46	96	24	15-33
WESTERN PA HOSPITAL PITTSBURGH PA 15224	PA-240	3628	11	9-15	274	31	18-34	84	23	21-41	75	15	11-32	165	24	17-31	159	28	30-47	54	19	11-36	232	21	14-27
WESTMORELAND HDSP ASSOC GREENSBURG PA 15601	PA-241	3531	11	9-16	199	29	21-37	101	29	20-39	77	19	10-31	256	18	17-29	109	39	30-50	118	26	14-33	256	20	15-28
WESTMORELAND-MC GINNIS HOS LIGONIER PA 15658	PA-242*	26	4	3-31	1	100	1-97	2	0	2-90	.	.		1	0	1-97	.	.		2	0	1-89	1	0	0-97
WILKES-BARRE GENERAL HOSP WILKES BARRE PA 18764	PA-243	3834	10	8-15	277	24	18-33	125	22	19-36	60	17	13-37	217	21	16-29	101	42	29-50	81	19	9-30	272	15	13-25
WILLIAMSPORT HDSP WILLIAMSPORT PA 17701	PA-244	2615	10	7-14	207	22	18-35	65	40	17-39	36	14	7-33	100	29	14-31	107	27	27-47	25	12	5-38	145	17	12-27
WILLS EYE HDSP PHILADELPHIA PA 19107	PA-245*	1702	0	0-9	95	0	9-28	.	.		.	.		.	.		.	.		.	.		.	.	
WINDBER HOSPITAL WHEELING WINDBER PA 15963	PA-246*	962	14	10-17	83	53	23-46	29	31	13-45	15	13	5-45	59	20	13-34	38	37	23-54	16	31	5-45	98	18	11-29
YORK HOSPITAL YORK PA 17405	PA-247*	4956	11	9-15	443	19	15-29	208	25	21-35	159	14	10-26	272	19	17-28	236	31	30-45	75	11	9-31	294	21	15-27

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
UNION CITY MEMORIAL HOSP UNION CITY PA 16438	2	50	8-97	.	.		.	.		.	.		42	5	1-18	4	25	0-85	3	0	0-96	33	0	1-19	13	8	0-62
UNIONTOWN HOSP UNIONTOWN PA 15401	39	33	15-50	49	27	25-55	70	4	5-21	2	0	0-100	282	4	3-9	146	9	2-12	17	0	0-43	339	4	3-8	87	2	0-9
UNITED COMMUNITY HOSP GROVE CITY PA 16127	8	25	9-70	4	25	4-77	30	3	2-24	7	0	0-100	92	3	2-12	46	2	1-19	10	0	0-95	117	2	2-11	42	2	0-16
UNIVERSITY HOSP MILTON HER HERSHEY PA 17033	31	6	5-40	16	50	22-69	26	4	2-28	11	0	0-99	106	5	3-13	57	4	1-16	25	4	0-50	271	5	3-9	155	1	0-6
UNIVERSITY MEDICAL CTR PHILADELPHIA PA 19147	1	100	1-97	6	50	11-78	.	.		.	.		34	0	1-19	6	17	0-64	1	0	0-100	15	0	0-36	9	0	0-79
VALLEY FORGE MED CTR HOS NORRISTOWN PA 19401	1	0	0-98	.	.		.	.		.	.		1	0	0-100	.	.		.	.		.	.		.	.	
W ALLEGHENY HOSP OAKDALE PA 15071	2	0	0-93	2	100	7-95	4	0	1-74	.	.		17	6	0-36	3	0	0-89	1	0	0-100	23	4	1-26	18	0	0-77
WARMINSTER GENERAL HOSP WARMINSTER PA 18974	6	33	5-71	23	48	17-56	30	7	2-25	1	0	0-100	81	1	2-13	50	4	3-21	3	0	0-100	119	2	2-10	51	0	0-13
WARREN GENERAL HOSP WARREN PA 16365	6	17	2-67	30	30	18-53	39	3	3-24	21	0	0-87	117	7	3-13	61	8	1-16	15	0	0-97	82	6	2-12	71	1	0-10
WASHINGTON HOSPITAL WASHINGTON PA 15301	37	30	11-45	37	46	27-61	90	8	4-18	18	6	0-93	343	6	3-9	174	9	3-12	28	4	0-90	276	3	2-7	261	2	0-4
WAYNE COUNTY MEMORIAL HOSP HONESDALE PA 18431	9	33	6-62	18	44	16-60	34	9	2-24	6	0	0-100	83	7	2-13	35	3	1-21	3	0	0-100	74	7	2-14	44	0	0-17
WAYNESBORO HOSP WAYNESBORO PA 17268	6	83	8-74	11	9	12-64	40	8	3-23	2	0	0-100	73	7	2-14	42	0	0-19	8	0	0-98	69	3	2-14	44	2	1-16
WEST PARK HOSP PHILADELPHIA PA 19131	8	38	6-65	13	54	15-65	28	18	4-31	38	0	0-32	80	6	2-13	79	9	3-17	7	0	0-97	105	6	2-12	35	0	0-21
WESTERN PA HOSPITAL PITTSBURGH PA 15224	33	42	12-49	36	47	27-61	67	18	5-22	14	0	0-96	278	5	4-11	123	5	3-14	23	0	0-85	595	7	3-7	171	2	0-6
WESTMORELAND HOSP ASSOC GREENSBURG PA 15601	24	17	10-50	27	30	22-60	73	4	4-20	11	0	0-100	373	4	3-9	135	2	2-13	15	0	0-99	328	4	3-9	237	2	0-5
WESTMORELAND-MC GINNIS HOS LIGONIER PA 15658	.	.		.	.		.	.		8	0	0-100	.	.		1	0	0-98	.	.		1	0	0-100	1	0	0-100
WILKES-BARRE GENERAL HOSP WILKES BARRE PA 18764	42	24	14-49	31	32	22-58	58	9	4-22	15	0	0-86	397	4	3-9	145	4	2-12	30	0	0-28	317	5	3-8	280	1	1-5
WILLIAMSPORT HOSP WILLIAMSPORT PA 17701	16	25	7-53	17	29	17-61	62	13	3-19	34	0	0-46	226	2	2-9	126	5	1-12	28	0	0-74	184	4	2-8	375	1	0-4
WILLS EYE HOSP PHILADELPHIA PA 19107	.	.		.	.		.	.		1402	0	0-1	.	.		.	.		.	.		.	.		8	0	0-98
WINOBER HOSPITAL WHEELING WINOBER PA 15963	6	0	4-69	13	15	17-67	10	0	1-47	5	0	0-99	106	7	3-13	41	7	1-19	12	0	0-94	90	4	2-11	38	5	0-19
YORK HOSPITAL YORK PA 17405	42	19	9-42	47	28	21-52	162	16	6-17	27	0	0-49	473	6	3-9	216	6	2-11	37	3	0-28	415	5	3-7	333	2	1-4

*Written Comments Not Submitted.

ABINGTON MEMORIAL HOSPITAL
ABINGTON, PENNSYLVANIA 19001 215-576-2001

Robert J. Harbison, III
Chairman, Board of Trustees

Felix M. Pilla, President
David J. Eskin, M.D., Chief-of-Staff

October 22, 1987

William L. Roper, MD
Administrator
Department of Health & Human Svcs.
Health Care Financing Administration
Washington, DC 20201

RE: Medicare Provider Number 390231

Dear Dr. Roper:

We have received a copy of Abington Memorial Hospital specific death rates for 1986, as well as the HCFA range of predicted mortality rates.

We are pleased to note that the actual mortality rate overall, as well as in all categories was less than the mean of the predicted range. In addition, the actual mortality in one-half (eight of 16) of the categories was at, or below the lower end of the predicted range.

Those groups which were at or below the predicted range include three of the six low risk groups (ophthalmologic disease, gynecologic disease and low-risk heart disease), as well as cerebrovascular accidents, gastrointestinal catrastropies, pulmonary disease, sepsis, and severe heart disease.

This last most important category of severe acute heart disease includes acute myocardial infarctions, which is the most important killer of Americans. Abington had an actual mortality a full 7% below the predicted mean mortality range. This is a most gratifying result of our long and intense program of management of acute myocardial infarctions. This includes being

one of the first hospitals to develop the concept of a coronary care unit with constant monitoring of heart rhythm and other monitoring of these patients. This program continues under the direction of eight board-certified cardiologists, who are geographically full time at Abington Memorial Hospital, as well as intense training of our resident staff and the coronary nursing specialists. Incidentally, Dr. Roderick Kitchell, former Chief of Medicine and Chief of Cardiology, co-authored the authoritative book on training coronary care nursing specialists and remains on our Emeritus Staff.

Please feel free to contact us if we can be of any further assistance in interpreting this information.

Sincerely,

Felix M. Pilla

/vbp

ALBERT
EINSTEIN
HEALTHCARE
FOUNDATION

York & Tabor Roads
Philadelphia, PA 19141

Executive Offices
215-456-7090

October 27, 1987 Provider 390142

Mr. Harvey Brook
Health Care Financing Administration
Health Standards and Quality Bureau
6300 Security Boulevard
Meadows East Building/Room 2D2
Baltimore, MD 21207

Dear Mr. Brook:

The following comments are to be included with our hospital mortality data. We have a strong concern that this data will be misunderstood by the media and the public at large. We anticipate that those reviewing the data will consider these comments.

Of specific concern is that the public will use the listing of hospital mortality rates to draw conclusions or make inferences about hospital quality. Mortality rates, by themselves, do not measure quality. The rates are best used by providers as quality screens to be used to signal investigation through chart reviews. As a result of those reviews, appropriate conclusions can be made regarding quality. Albert Einstein Medical Center continues to be committed to high quality care for all patients. Internal quality reviews are performed by physicians and other professionals for use in determining and maintaining our high standard. These internal reviews continue to indicate that quality care is being provided.

Since the HCFA data applies only to Medicare patients, it is not representative of the entire patient population treated and is therefore misleading. In addition, critical factors such as the severity of illness upon admission, the admitting status (emergency, admission from nursing home, etc.) and the physiologic condition at the time of admission are not considered. These factors will have an impact on the mortality rate.

In addition, this data selects the last of multiple admissions for a patient. This tends to increase and overstate the mortality rate. Since the data relate to Medicare deaths occurring within 30 days of the last admission, deaths following discharge are also included. The data cannot be used effectively to draw conclusions on a hospital's performance.

Our mission is to deliver high quality health care services. We believe in healthcare consumerism and that the public has a right to know valid information from which they can make informed decisions. We do not believe that the use of this particular mortality data will assist the public in reaching those decisions.

Sincerely yours,

Robert B. Kimmel

Robert B. Kimmel
Vice President
Albert Einstein Healthcare Foundation

RBK/kk:pk/pob
(0184B)

ALIQUIPPA HOSPITAL

2500 Hospital Drive
Aliquippa, Pennsylvania 15001
412/857-1212

October 26, 1987 Medicare Provider No: 390176

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for allowing us to provide input on the mortality statistics for the year 1986.

The data reported by HCFA has been reviewed by the Board of Directors through its Joint Conference Committee, the Hospital Administration, the President of the Medical Staff, the Chairman of the Quality Assurance Committee, the Chairman of the Utilization Review Committee and the Director of Medical Records. We note that our mortality rate in every diagnostic category is within the ranges of predicted mortality rates.

We are sure that you recognize, as we do, that these rates do not reflect a true measurement of the quality of care rendered to our patients. Aliquippa Hospital is an acute care facility that has been providing quality services to the community for thirty years. In an ongoing effort to provide excellent services, a Quality Assurance monitoring program is in place. It is conducted by members of the Medical Staff. Review of mortality cases is only one component of the program. The Medical Record of each patient who expires at this facility is carefully reviewed for appropriateness of care.

Aliquippa Hospital will analyze your information in our constant endeavor to improve care rendered to our patients. Again, thank you for the opportunity to present this response.

Sincerely,

Howard W. VanScoy, Jr.
President and Chief Executive Officer

Foster Hages, M.D.
Chairman, Medical Care Appraisal and Medical Records

HWV:FH:bts

The Allentown Hospital

October 27, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, DC 20201

Medicare Provider #39-0133

Dear Dr. Roper:

According to the Health Care Financing Administration (HCFA) data, in calendar year 1986, The Allentown Hospital had 2,157 Medicare admissions with a mortality rate of 15%, which is in the predicted range for this hospital.

While we recognize and support HCFA's intent to provide information to aid consumers in making decisions about their health care and to provide tools to enable hospitals to improve performance and internal management, it is critical that the information from which inferences are drawn be reflective of actual experience.

While HCFA has attempted to refine the statistical methodology employed in this data release, the most critical adjustment, that for severity of illness, is lacking due to HCFA's inability to collect such data. A severity index relatively indicates how sick a patient is. For example, a high severity index indicates that a patient is sicker and, therefore, has a higher risk of mortality.

Various systems which assess patients' severity of illness have been developed. One such system is MedisGroups, which The Allentown Hospital has recently installed. MedisGroups, a computerized system based on objective clinical findings, yields a severity index for each patient. Collectively, these indices represent the relative severity of patients admitted to the Hospital.

For instance, the MedisGroups' 1986 national comparative data base indicates a severity index ranging from 1.92 to 2.49 (based on a 0-4 range) for those diagnostic related groups associated with sepsis. Although not in use at The Allentown Hospital during calendar year 1986, abstracting those calendar year 1986 mortalities associated with sepsis indicates a severity index of 2.80. Similarly, the MedisGroups' national data show an average weighted severity of 2.45 for heart failure and shock. The mortalities at The Allentown Hospital in calendar year 1986 in the category of severe chronic heart disease abstracted into the system yield an average severity of 2.95. These examples suggest that these patients were sicker and, therefore, carried a higher probability of death.

An extension of the severity issue also unaccounted for in the HCFA methodology is institutional differences. Patients admitted to tertiary referral centers offering particular areas of clinical expertise (such as Allentown Hospital's renal service) will most likely be more severely ill and, again, have a higher risk of mortality. Without severity adjustments, the tertiary hospital may appear to have significantly higher mortality rates than those hospitals which typically treat less severe cases.

As stated by HCFA, "A difference between a hospital's actual and expected mortality rates cannot be definitely construed as reflecting especially high or low quality of care." Laden with the aforementioned flaws, caution in the use of the HCFA data is urged. The data could well be misinterpreted, resulting in inaccurate conclusions regarding hospitals and physicians, which, in turn, could inappropriately affect consumers' decisions.

The Allentown Hospital maintains an active Quality Assurance Program to ensure the delivery of high quality care to its patients. In addition to conducting case review on a continuous basis, its quality assurance efforts are guided by evaluation of definitive data. Again, it is recognized that HCFA has attempted to provide useful data. However, it is a truism that there are major flaws with the HCFA approach. Use of the severity indices as described in this letter are necessary to assure accurate information to providers and consumers alike.

Thank you for the opportunity to respond.

Sincerely,

Richard J. Kisner
Senior Vice President

RJK:lah

ANDREW KAUL MEMORIAL HOSPITAL

Because We Care

Johnsonburg Road
St. Marys, Pennsylvania 15857
(814) 781-7500

October 28, 1987
Provider #: 390154

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear HCFA Administrator:

Andrew Kaul Memorial Hospital has received and reviewed the mortality data relative to our Medicare patients for the 1986 calendar year. As requested, we would like to identify the following discrepancies found during the verification process:

1. [redacted] in category GI was reported in the HCFA Data as a post-hospital death, while our records show that the patient was transferred to Geisinger Medical Center and should not be included in our data.
2. [redacted] in category PN was reported in the HCFA Data as a post-hospital death, while our records show the patient to be an in-hospital death.
3. [redacted] in category PN was reported in the HCFA Data as a post-hospital death, while our records show that the patient was transferred to the V.A. Hospital in Pittsburgh and should not be included in our data.
4. [redacted] in category RN was reported in the HCFA Data as a post-hospital death, while our records show the patient was transferred to Geisinger Medical Center and should not be included in our data.

The remaining HCFA Data appears to be correct and self explanatory requiring no additional comments. Any questions relative to the discrepancies, please call my office at (814) 781-7500, Extension 250.

Sincerely,

Guido J. Berasi
Administrator

Attachment

ATTACHMENT 5

ANDREW KAUL MEMORIAL HOSPITAL Provider #390154

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	9	4	9	4
CE -- Cerebrovascular Accidents	10	3	10	3
GC -- Gastrointestinal Catastrophes	6	0	6	0
GI -- Gastrointestinal Disease	3	1	3	0
GU -- Urologic Disease	0	0	0	0
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	0	1	0	1
HM -- Severe Chronic Heart Disease	9	3	9	3
HS -- Severe Acute Heart Disease	5	0	5	0
ME -- Metabolic/Electrolyte Disturbances	1	0	1	0
OP -- Orthopedic Disorders	1	0	1	0
PN -- Pulmonary Disease	6	6	7	4
RN -- Renal Disease	1	1	1	0
SE -- Sepsis	2	1	2	1
TR -- Severe Trauma	2	0	2	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	7	4	7	4
Total -- All Categories	62	24	63	20

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

THE BLOOMSBURG HOSPITAL

BH

Comments Regarding HCFA Mortality Data

The Bloomsburg Hospital

Since HCFA counts on the most recent admission of those Medicare patients who expired during the 1986 calendar year, their records show only 1019 admissions. The Bloomsburg Hospital's admission records show a total of 1696 Medicare admissions, adjusted for related readmission, for the same period of time. Had all the admissions been counted, our mortality rate would have been only 9%. HCFA also takes into account deaths occuring as long as thirty days after discharge from the hospital. Nineteen percent of the deaths counted against our facility were in this category. By including this criteria in HCFA's study, it places the Hospital in a difficult position to verify and assess this statistic. If deaths occuring outside the hospital were excluded, the mortality rate would be further reduced to 7%.

The average age of the Medicare patients who were reported as part of our mortality statistics is 82 years of age. Patients of this age often have chronic ailments, conditions from which they will never fully recover. In compiling the mortality data these chronic conditions were taken into account; however, there is no mechanism for measuring the severity of these conditions or the severity of the illness which necessitated the admission. In fact in reviewing the charts of those who died in our hospital, approximately 80% of the charts revealed cases in which the patients were in advanced stages of illness, so advanced that death was the expected outcome.

Of note would be that our facility has very low mortality rates in the areas of: gynecological, gastrointestinal, and urologic diseases. Pulmonary disease, on the other hand, claimed the most lives; however, in this category over half of the patients were admitted from other health care facilities and had various underlying chronic conditions which added to the complexity of the situation. Again, severity of illness was not used as one HCFA's criteria in establishing the mortality rates.

HCFA's intent in making the mortality rates available to the public is to help them make more informed decisions about their health care. The Bloomsburg Hospital has an on-going quality of care and risk management review to insure the best care possible to our patients regardless of the age. Outside monitoring will not change the fact that we will continue to strive for excellence through internal monitoring and review.

We are a community hospital and feel a strong sense of responsibility to meet the health care needs of our service area. We are here to serve in an effective and efficient manner those entrusted to our care.

549 East Fair Street, Bloomsburg, Pennsylvania 17815 (717) 387-2100

BRADDOCK GENERAL HOSPITAL
400 HOLLAND AVENUE
BRADDOCK, PENNSYLVANIA 15104
MAIN NUMBER (412) 636-5000

October 16, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We have received for review and comment our mortality statistics for Medicare patients treated in 1986 which are scheduled to be published in December, 1987 by the Health Care Financing Administration.

We were pleased to note that our actual mortality rates were well within the range of the predicted mortality rates for our institution in all diagnostic categories. However, we feel that the use of mortality statistics, especially when the sample is small, is of limited value in assessing the quality of care that has been provided. With this in mind, our Quality Assurance Department reviewed 81 of our 212 mortalities with special attention directed toward patients that expired following discharge. No problems were identified.

As a community hospital, we continually strive to provide high quality health care at the lowest possible cost to the patients we serve. This goal has become more difficult each year as we find our reimbursement from Medicare shrinking.

We thank you for the opportunity to comment.

Sincerely,

Danne R. Sholes
Acting Executive Director

DRS/fo

BRADFORD HOSPITAL

116-156 Interstate Parkway • Bradford, Pennsylvania • 16701 • (814) 368-4143

October 26, 1987

Mr. William Roper
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

RE: Medicare Provider #39-0118

Dear Mr. Roper:

The following is in response to the plans for the publication of selected mortality information about all short term care hospitals which treated Medicare patients in 1986.

The enclosed summary identifies our review and interpretive comments to reflect our experience about Medicare patients treated at the Hospital in 1986.

Please do not hesitate to contact me for any questions you may have.

Sincerely,

Michael G. Guley
President/CEO

MGG/sjb

Enclosure

Data Verification

The data used by HCFA indicated that a total of 111 Medicare patients admitted to 390118 hospital died within 30 days of admission. Our own records indicate that 110 Medicare patients died within 30 days of admission. The discrepancy is based on the following case not accounted for within our hospital records. [redacted] 92 F 11/8/87 was repeated twice with two different surnames, but the same age, sex, date of admission, date of discharge, date of death and the same principal diagnosis. This appears to be an error. Of the 110 Medicare deaths, 87 died while still a patient of the hospital, while 23 died after discharge.

Our own records also indicate that 1,776 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at another hospital is correct.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretative Remarks

In two of the diagnostic categories, the Hospital's actual mortality rate falls outside of the range of the predicted mortality rate.

In the diagnostic category HL (low-risk heart disease) the actual mortality was 12% compared to the range of predicted mortality rate of 2-11%.

In the diagnostic category RN - the actual mortality was 0% compared to the range of predicted mortality of 4-60%. In all other diagnostic categories, the actual mortality rate was within the range of predicted mortality. No diagnostic categories revealed an unusually large percentage of deaths occurring after discharge.

Results of Preliminary Medicare Record Review

Interpretative comments were directed to concentrate on diagnostic category HL, in which the actual mortality rate was 1% > than the predicted range of mortality (2-11%).

Retrospective review of all 14 cases resulted in the following findings:

9 cases out of 14 were verified as in-hospital deaths
5 cases out of 14 were identified as post-discharge deaths

The nine cases identified as hospital deaths were all reviewed for verification.

5 deaths occurred in < 48 hours
4 deaths occurred in > 48 hours

All deaths reviewed were justified. Patients had a large number of complications, severe chronic and high risk diagnoses associated with an age factor.

Average age of all HL patients who died was 83.

The 5 cases identified as post-discharge deaths were also reviewed.

Documentation in all cases supported an anticipated outcome of death.

Summary

The Hospital mortality rate did not have any "significant" deviations from the HCFA predicted mortality rate. The Hospital does not offer special services like a hospice program, care for terminally ill patients, specialized cardiac care, services for burn victims and would, therefore, not attract patients with a higher than average expected mortality.

However, the Hospital plays an active role in meeting the medical needs of its community. The Hospital serves as a primary care center for the nursing home residents in the Bradford area. The Hospital acts as the primary service center for the Visiting Nurses Association, that accommodates both chronically ill patients as well as hospice patients. The Hospital acts as a sole community provider for 75% of the McKean County residents.

Over 95% of the patients admitted to Bradford Hospital reside locally.

The Hospital, therefore, services the needs of patients that are both chronically ill with degenerative conditions, as well as patients who are associated with a high risk of death.

Brandywine Hospital
201 Reeceville Road
Caln Township, Pennsylvania 19320
(215) 383-8000

Office of the President

October 23, 1987

Medicare Provider Numbers
390076

William L. Roper, M.D.
The Adminstrator
Department of Health & Human Services
Health Care Finance Administration
314G Humphrey Building
200 Independence Ave., S.W.
Washington, D.C. 20201

Dear Doctor Roper:

Brandywine Hospital and Trauma Center of Caln Township, Chester County, Pennsylvania received HCFA's mortality statistics and has reviewed this information. These statistics measure the relationship between mortality and a selected group of patient characteristics, but the statistics do not measure the hospital's performance in terms of the quality of care provided. By themselves, the mortality rates do not measure quality. Quality can best be evaluated through ongoing peer review process at Brandywine Hospital and Trauma Center by all providers.

Brandywine Hospital and Trauma Center is committed to providing quality care for all patients. The hospital's governing board, management, and medical staff are firmly committed to the delivery of the highest care possible. Brandywine Hospital and Trauma Center has active, ongoing Quality and Assurance and Utilization Management Committees. These committees consist of health care professionals who review the care provided to our patients beginning with admission. Throughout the patient's hospitalization, the types and the timeliness of care provided are closely monitored. This monitoring enables us to ensure our patients receive the appropriate care for their illness or injury and that this care is provided in an efficient, expedient manner. If there is any indication of a potential quality problem, there is a prompt investigation to determine if indeed a problem does exist. Brandywine Hospital and Trauma Center also strives to meet special needs at the time of discharge to ensure a continued high level of care after hospitalization.

The Better Health People

After review of the HCFA mortality statistics there are some corrections in Brandywine Hospital's statistics:

The following was a case discharged alive by the hospital

[redacted]

Discharge	Expired
3/19/86	3/21/86

HCFA reported this case as expired on discharge.

Cases that dates differ from HCFA

Cases As Reported by HCFA				Cases Verified by Hospital			
Adm.	Disch.	Exp.	Prin. Diag.	Adm.	Disch.	Exp.	Prin. Diag.
[redacted]							
1/12/86	1/16/86	2/2/86	5950GU	1/20/86	2/2/86	2/2/86	4820PN
[redacted]							
4/21/86	4/30/86	5/8/86	4351UN	5/4/86	5/8/86	5/8/86	42789HL
[redacted]							
12/16/86	12/19/86	12/19/86	no change	12/16/86	12/20/86	12/20/86	no change

These are the only changes that can be identified and verified by the hospital from the information received as HCFA used data not available to the hospital.

In addition, I would like to document the following concerns on releasing this information in the proposed format.

1. These statistics do not provide a true picture of the patient population. They do not include all age patients, payor types, or the total number of actual cases admitted to Brandywine Hospital and Trauma Center in 1986. The statistics count only the last admission of a Medicare patient in 1986. This type of calculation would tend to increase the hospitals mortality rates.

2. The statistics do not account for the patients' severity of illness, age, complications, or past medical history. Many cases reported in the statistics were patients with terminal illnesses, irreversible conditions, or with multiple deteriorating medical conditions. Life expectancy and life quality are extremely questionable with patients in these catagories. By not considering the severity of illness of the patient population or including the hospital's entire population in the statistics, the mortality rates do not accurately reflect the hospital's overall performance.

3. The data does not reflect the number of patients who were admitted from long term care facilities, the emergency room or were transferred from other institutions. Brandywine Hospital is a state accredited Trauma Center and has a Renal Dialysis Unit. By offering these specialized services to the community, the hospital increases its severity index which may in turn increase the mortality statistics. However, as a healthcare provider Brandywine Hospital and Trauma Center is committed to offering all services to the patient population.

I believe that Brandywine Hospital and Trauma Center practices quality medicine, but I have serious concerns as to how the general public may interpret the statistics printed.

Thank you for cooperation in correcting the data and your consideration of these comments.

Sincerely,

Norman A. Ledwin
President

NAL/tb

September 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Gentlemen:

Reference your letter of September 21, 1987. Enclosed please find the mortality listing for Brookville Hospital (ID NO-390191). We have indicated via an asterisk on the list those patients who did not die in Brookville Hospital but were discharged alive.

While acknowledging that your methodology includes Medicare patients who died within 30 days of admission, we wish to go on record as objecting to the inclusion of these patients into your model. Your hypothesis appears to be that there is a relationship between the last admission and care received during that admission and the patient's death. Your data base does not provide specific information as to cause of death and neither does the Hospital's. Unless we invade a family's privacy, which you encourage us not to do, or spend valuable time reviewing cases with physicians, the aforementioned relationship or lack thereof is not possible to be identified.

In summary, considering the data base available to HCFA for this effort, mortalities and mortality rates should be calculated based upon hospital deaths not deaths that occurred after discharge.

Thank you for the opportunity to comment on this important subject.

Sincerely,

Warren J. Bassett
President

WJB/mkn
Enclosure

"The Heart and Pulse of Jefferson County."

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Butler Memorial Hospital

October 26, 1987

William L. Roper, M.D.
Administrator
HealthCare Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dr. Dr. Roper:

In response to the mortality information sent to our hospital concerning those patients who died within 30 days of their last admission of 1986, we have found one error. On the second page of actual patient data, we have found one patient who was counted twice. The patient I.D. number, diagnostic category, age, sex, admission date, discharge date, death date, principal diagnoses, are all the same, with the only difference being the surname. We have a record of this patient under one of the surnames. We would appreciate if you could change your data to reflect this information.

In any event, the actual mortality rate for this diagnostic category does not change due to rounding of the percentages.

For ease of your review, our hospital I.D. is #390168 and the patient's I.D. is [redacted]

Thank you for your attention to this matter.

Sincerely,

Scott A. Becker
President & CEO

kjf

Certified Mail

911 East Brady Street, Butler, Pennsylvania 16001 (412) 283-6666

CANONSBURG GENERAL HOSPITAL
R.D.1 Box 147 Route 519
Canonsburg, Pennsylvania 15317

412-745-6100

October 16, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Healthcare Financing Administration
Washington, D.C. 20201

RE: Medicare Provider # 39-0160

Dear Dr. Roper:

Thank you for permitting Canonsburg General Hospital to review and comment on the HCFA mortality data prior to its public release.

I would like to first point out that the formula which HCFA is currently using to establish "acceptable" rates of death, to the extent that they are interpreted by the public to represent parameters of quality hospital and medical care, are misleading. Regardless of disclaimers to the contrary, it is likely that persons, seeking an easy answer to a complex question, will mistakenly judge "good" and "bad" hospitals on the basis of this report.

With respect to the particular data relative to Canonsburg General Hospital Medicare patients, in review of the patient listings our hospital records reflect differences in diagnostic coding in five cases.

Sincerely,

Gary L. Perecko
President and Chief Executive Officer

/lu
10/24

Carlisle Hospital
P.O. Box 310, 246 Parker St., Carlisle, PA 17013
717-249-1212 • 1-800-346-4789

October 27, 1987

Office of the Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Sir:

The hospital specific mortality data prepared by HCFA and submitted to Carlisle Hospital for review and comment has been verified and analyzed. In preparing comments to accompany the publication of the data the Carlisle Hospital unequivocably states that mortality data is not in and of itself an indication of quality of care, as the case mix and demographics of the patient population as well as the types of services provided by the hospital significantly affect morbidity and mortality.

In reconciliation of the HCFA provided mortality listings with Carlisle Hospital mortality records one discrepancy was identified:

> 4 patients were identified by HCFA as having a date of death after discharge, however those deaths did occur while the patient was hospitalized.

Of the 34 patients whose deaths occurred after discharge, 76% were discharged with post-discharge services, one patient left the hospital against medical advice and the remaining 7 patients died of natural causes.

Sincerely,

Kim Balbach

Kim Balbach
Vice President
Ancillary Services

KB/cec

CENTRAL MEDICAL CENTER & HOSPITAL
1200 Centre Avenue, Pittsburgh, PA 15219

(412) 562-3000

COMMENTS ON HCFA MORTALITY DATA

The data submitted by HCFA indicates that a total of 59 Medicare patients admitted to Central Medical Center and Hospital died within 30 days of admission. Of these, 47 died while still a patient of the hospital, while 12 died after discharge. Our own records indicate that 1,656 Medicare admissions occurred in 1986. Presumably, the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. It is impossible to determine the percentage of the 12 patients dying after discharge who were in fact alive because information concerning death after discharge is not included in the patient's medical record.

In all of the diagnostic categories, the hospital's actual mortality rate falls inside the predicted mortality range.

Office of the President

THE CHAMBERSBURG HOSPITAL
112 North Seventh Street, P.O. Box 187
Chambersburg, Pennsylvania 17201-0187
Telephone: (717) 267-7138

October 27, 1987

Mr. Harvey Brook
Health Standards & Quality Bureau
Meadows East Building
2-D-2
Baltimore, Maryland 21207

Dear Mr. Brook: Medicare Provider #390151

Your intention to release hospital mortality data is intellectually disappointing.

Hospitals have comprehensive quality assessment programs to review many aspects of care through a professional approach of peer review.

You, your staff, hospitals and the medical community know that Mortality statistics alone cannot be used to reflect the quality of care in a hospital.

Sincerely,

Stephen H. Franklin
President

SHF/s

Citizens General Hospital
Executive Director
651 Fourth Avenue
New Kensington, Pennsylvania 15068-6591
(412) 337-5010

October 27, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sir/Madam:

We have reviewed the mortality information concerning Medicare patients treated in Citizens General Hospital in 1986; this information was provided to us in September by Dr. William Roper, Administrator of the Health Care Financing Administration (HCFA).

You will find enclosed our comments regarding the information to be published by HCFA with our hospital-specific mortality information in December 1987. We have also enclosed a list of corrections that we made, based on the information that we have in our records, to the list of individual 1986 Medicare patients provided to us as part of the above-mentioned mortality information.

If there is any other information that you need or if you have any questions about the comments or information that we have provided, please contact me or Mr. Jay Joseph, our Director of Medical Records.

Sincerely,

Robert E. Marino

Robert E. Marino
Executive Director

REM/mg

Enc.

Citizens General Hospital
651 Fourth Avenue
New Kensington, Pennsylvania 15068-6591
(412) 337-3541

Provider No. 390018

COMMENTS ON 1986 HCFA MORTALITY DATA

Citizens General Hospital is a licensed 252-bed, acute care facility. Acute care is defined as care requiring twenty-four-hour-a-day observation and treatment by a physician and/or nurse. Patients no longer requiring acute care are evaluated for the need of continued care after discharge. Our Social Service Department makes arrangements for those patients found to need continued care.

Data Verification

The data used by the Health Care Financing Administration (HCFA) includes 2,191 Medicare discharges from Citizens General Hospital in 1986. Because this includes only the last stay in our hospital for each of our 1986 Medicare patients, this number is difficult for us to verify.. Many Medicare patients have multiple admissions during the course of a year, and our internal data includes all of them. Of the 2,191 cases identified in the HCFA data, 263 or 12% of those patients died within 30 days of admission. One of the 263 patients who died was found not to be a Medicare recipient at the time of death and, therefore, should not have been included in this data. In addition, five dates of death and four dates of discharge were found to be incorrect as listed. These corrections have been provided to HCFA.

Interpretation of Data

Citizens General Hospital's actual mortality rate was within the HCFA range of predicted mortality rates for Citizens General Hospital in all 16 diagnostic categories listed and for the total number of Medicare cases. Further review indicates that:

178 patients or 67.7% of the deaths occurred in "high risk" categories (i.e.,cancer, stroke, renal disease,etc.).

30 patients or 11.4% of the deaths occurred in "low risk" categories (average age of these patients was 75-87 years).

55 patients or 20.9% of the deaths occurred in patients not categorized into one of the 16 diagnostic categories. Diagnoses included uncontrolled diabetes, acute bronchitis with chronic obstructive lung disease, gastrointestinal bleeding with liver disease.

43 patients or 16.3% of the deaths occurred after the patient was discharged from the hospital (cause of death unknown).

The following should be taken into consideration when interpreting this data:

1. The goal of Citizens General Hospital is to always provide quality care according to the patient's needs and based on widely accepted standards of practice (expected care for a patient with a given problem).

2. Mortality rates do not provide a measure for the quality of care provided in hospitals. Each patient's hospital stay must be evaluated to determine if appropriate quality of care was provided.

   Such an evaluation of appropriate care takes into consideration:

   1. Age of patient.
   2. The severity of the patient's illness.
   3. Diagnosis or diagnoses.
   4. Whether or not the patient or family accepts all of the care that is offered.

   Quality of care is routinely evaluated and monitored in this manner by physician-supported committees at Citizens General Hospital. Review of the medical record of every patient who dies is an important part of this ongoing process.

3. Mortality rates should be measured over an extended period of time. The longer the period of time considered (and, thus, the more cases included) the more valid the actual mortality rates become.

4. HCFA assigned patients to a diagnostic category based on the reason for which they were admitted to the hospital. That diagnosis is not always, however, the cause of death. For instance, a patient who has had heart disease for a long time could be admitted to the hospital for an emergency appendectomy, but suddenly die because of the heart disease. Similarly, the diagnosis for which a patient was last admitted to the hospital may very well not be the cause of death of the patient after he/she was discharged from the hospital. A patient may have been discharged after suffering a heart attack and later be struck and killed by an automobile. The cause of death for those patients who died in the hospital could only be determined by individual chart review. The cause of death for those who died after discharge from the hospital could not be determined since this information is not in the patients' hospital charts.

5. Comorbid conditions (diagnoses that patients experience along with the reason for admission and which complicate management or treatment) are often the cause of death. A review of patients expiring after discharge in "high risk" groups noted comorbid conditions of cardiovascular disease, cancer, renal failure, dementia, diabetes mellitus and/or chronic obstructive pulmonary disease..

   Patients in "low risk" groups were found to have comorbid conditions of cancer, cardiovascular disease and/or chronic obstructive pulmonary disease.

6. This mortality report includes only Medicare patients. Medicare patients accounted for approximately 46% of the discharges from Citizens General Hospital in 1986.

HIC#	Surname	Diagnostic Category	Age	Sex	Date of Admission	Date of Discharge	Date of Death	Corrected Date of Death
[redacted]	[redacted]	CA	77	M	5/22	5/22	5/31	5/22/86
[redacted]	[redacted]	CE	76	F	12/3	12/10	12/31	12/10/86
[redacted]	[redacted]	HM	94	F	5/29	6/3	6/24/86	6/27/86
			Corrected last adm.:		6/21	6/27		
[redacted]	[redacted]	HS	77	M	5/14	6/6/86	6/10/86	
			Corrected last adm.:		6/10	6/10		
[redacted]	[redacted]	GI	91	F	4/11	4/15/86	5/7/86	
			Corrected last adm.:		4/21	5/7/86		
[redacted]	[redacted]	HL	77	F	10/28	11/3/86	11/13/86	
			Corrected last adm.:		11/9	11/13/86	This admission was HMO, not Medicare recipient.	
[redacted]	[redacted]	HM	90	M	1/24	1/28	1/31	1/28/86
[redacted]	[redacted]	PN	77	M	5/24	5/28	5/29	5/28

PA 52.3

(814) 765-5341

Clearfield
Hospital

October 23, 1987

William Roper, M.D.
Administrator
Dept. of Health & Human Services
Health Care Financing and Administration
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for the opportunity to comment on the Health Care Financing Administration Mortality Data, which you intend to publish in December. We would appreciate publication of the attached comments; if you have any questions please feel free to contact me.

Sincerely,

Richard L. Adams
Acting Chief Executive Officer

RLA:rlf

att.

809 TURNPIKE AVENUE • P. O. BOX 992 • CLEARFIELD, PA. 16830

(814) 765-5341

Clearfield Hospital

TO: HEALTH CARE FINANCING ADMINISTRATION

RE: COMMENTS - MORTALITY DATA RELEASE

DATE: OCTOBER 23, 1987

Following review of the data, a multi-disciplinary committee of Clearfield Hospital finds that the actual mortality rate is well within the predicted range of mortality for all 16 diagnoses. The diagnostic categories which are found to be at the mean or slightly above include: cancer, cerebral vascular accidents, pulmonary diseases, acute and chronic heart disease. This could be attributed to many factors which include the fact that Clearfield Hospital is a primary referral hospital for two area nursing homes. Many times patients who are terminally ill or who are suffering from diseases associated with the elderly are admitted to the hospital. Secondly, it must be noted that the Clearfield service area has a predominately elderly population. Last year over 39% of the admissions to Clearfield Hospital were Medicare patients and this group of patients consumed 57% of the total patient days.

When reviewing these statistics, it is important to remember that these are numbers only and do not show quality of care received by patients who were treated in the hospital.

The peer review process within each hospital addresses quality of care. In conclusion, Clearfield Hospital believes that these statistics, at best, could be used to better focus quality assurance activities; and that these statistics show that the number of Medicare patients who expired was within the predicted range.

809 TURNPIKE AVENUE • P. O. BOX 992 • CLEARFIELD, PA. 16830

Columbia Hospital

Founded 1895

Provider No: 390200

October 23, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

To whom it may concern:

Persuant to our review of specific diagnostic categories in the HCFA mortality information report, we submit the following comments:

(1). We could not verify nor substantiate the number of "cases" and the "actual morality rate" that was reported.

(2). Diagnositic Category; CA - Cancer:

Our records indicate that three (3) of the mortalities in this category were terminal CA cases admitted to the hospital during the final stages of their illness. The average length of stay for these three cases was less than or equal to two (2) days.

(3). Diagnostic Category; CE - Cerebrovascular Accidents:

The six (6) mortalities in this category had a mean age of 79 and a median age of 83. The average length of stay for these six (6) cases was 9.5 days.

(4). Diagnostic Category; HM - Severe Chronic Heart Disease:

The eleven (11) mortalities in this category had a mean age of 79 and a median age of 81. The average length of stay for these eleven (11) cases was 6.8 days.

(5). Diagnostic Category; HS - Severe Acute Heart Disease:

The eight (8) mortalities in this category had a mean age of 76 and a median age of 77. The average length of stay for these eight (8) cases was 2.3 days.

(6). Diagnostic Category; ME - Metabolic/Electrolyte Disturbances:

The three (3) mortalities in this category had a mean age of 82 and a median age of 90. The average

631 POPLAR STREET P.O. BOX 868 COLUMBIA, PA 17512 (717) 684-2841

(6). Diagnostic Category; ME - Metabolic/Electrolyte Disturbances:

length of stay for these three (3) cases was 9.3 days.

(7). Diagnostic Category; SE - Sepsis:

The two (2) mortalities in this category had a mean age of 83 and a median age of 83. The average length of stay for these two (2) cases was 10.5 days.

COMMUNITY GENERAL HOSPITAL

145 N. Sixth St., P.O. Box 1728, Reading, PA 19603-1728 • (215) 376-4891

October 21, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Community General Hospital has recently completed a review of the mortality data compiled by HCFA and according to the HCFA data, of the 1,412 Medicare patients admitted to our hospital in 1986, there were 173 deaths that occured within 30 days of admission. Of these, 122 died while still patients in the hospital, while 51 died after discharge. Our own records confirm that these 173 patients were indeed admissions to our hospital. We were also able to confirm that 167 of these patients did expire; on the remaining six, the outcome could not be verified. There was a discrepancy between the two sources regarding the date of death on three of the cases. Review of our records also indicates that the principal diagnosis on one of the cases was reported incorrectly by HCFA and therefore the case should have been placed in a different diagnostic category.

Although we were able to verify some of the information presented above with only minor discrepancies discovered, we have no way of verifying whether the number of Medicare patients reported by HCFA to have been treated at Community General Hospital is correct. Presumably this is due to the fact that there are cases of multiple admissions of patients to our hospital as well as other hospitals. Without the availability of all the information utilized by HCFA, it is impossible to verify the accuracy of the data used in the analysis.

In all of the diagnostic categories detailed by HCFA, our hospital's actual mortality rate fell within the range of the predicted mortality rate. Although these results are favorable to our hospital, it is impossible to review the quality of all the HCFA data for numerous reasons, including the difficulty of determining whether the deaths that occured after discharge were related to the condition of the patient that was under treatment at the time of discharge or whether they resulted from post-discharge management of the patient, and the fact that severity of illness is not addressed.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

We feel that the main function of this statistical data should be to identify potential areas for further evaluation and should be used as such and not as a complete measure of the quality of care at any one hospital.

Sincerely,

Lawrence A. Scanlan, Jr.
President

ko

Community General Osteopathic Hospital
4300 Londonderry Road
P.O. Box 3000 Harrisburg, Pa. 17105 • (717) 652-3000

GEORGE R. STROHL JR.
PRESIDENT

October 23, 1987

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

RE: For Publication with Public Release of 1986 HCFA Mortality Data.

Dear Dr. Roper:

In reviewing our hospital's mortality data it is readily apparent that mortality rates for Medicare patients are significantly higher than for non-Medicare patients. This is to be expected as Medicare patients are both older and sicker than most other patients. All of the Medicare mortalities attributed to our hospital exhibited more than one medical problem, or co-morbidity. In a review of all patients discharged from CGOH in 1986, non-Medicare deaths comprise 0.96% of discharges. Medicare deaths account for 3.2% of total hospital discharges. The average age of Medicare patients who expired at CGOH was 78 years.

We reviewed the medical records of all Medicare deaths according to the data supplied by HCFA. The HCFA data is inaccurate in that three deaths recorded by HCFA as occurring outside the Hospital, in fact, occurred at the Hospital.

We identified and carefully reviewed each medical record for accuracy of coding, and performed an evaluation of medical care delivery. Each individual review revealed an expected poor outcome. This statement is supported by the fact that of the 187 deaths, 130 (70%) were categorized as "Do Not Resuscitate" (DNR) in accordance with the patients', or their families', wishes. The DNR category is reserved for the hopelessly ill patient and is applied only after extensive consultation among the patient, the family and the attending physician. This categorization reflects both the hopelessness of the medical condition and demonstrates the compassionate, supportive and appropriate nature of the care provided to these seriously ill patients at our hospital.

We further identified only one category of patients in which the predicted mortality rate was exceeded, and only two categories in which even the mid point of the predicted mortality rate was exceeded. In the first category,

Cerebrovascular Accidents (CE), 24 deaths occurred in a total of 48 cases. Our review, however, reveals that 22 of the 24 deaths had been designated DNR in accordance with the patients' or the families' wishes. Similarly, in the latter two categories, Cancer (CA) and Acute Severe Heart Disease (HS), 21 of 25 and 10 of 20 patients, respectively, were designated DNR. All other categories that were examined were well below midpoint of the HCFA predicted mortality rate.

The fact that 70% of all Medicare deaths occurring at CGOH were designated DNR only reflects the severity of illness and demonstrates that the final outcome was expected by both the family and the physician, in most cases, and was unavoidable. HCFA's data, of course, takes no account of the gravity of the patient's illness and provides the layman with no valid supporting data with which to interpret such data. In our opinion, HCFA's data is misleading without the inclusion of such information as discussed herein, and serves little purpose, other than to alarm the public. Further, we believe that much of the data is unfairly distorted since many diagnostic categories represent only a small number of cases.

Subtracting the DNR deaths from our total Medicare deaths reveals a 4% mortality rate for all causes of Medicare deaths, considerably lower than HCFA's listed 14%. In addition, 28 (15%) of the 187 deaths attributed to our hospital occurred following discharge. We think it unreasonable that the Hospital be held accountable for situations over which we had no control. Subtracting DNR patients and those who died after leaving our hospital, we arrive at a more realistic mortality rate of about 2%, well below HCFA's acceptable range.

Sincerely,

George R. Strohl, Jr.
President

GRS:CIM/lss

Community Hospital of Lancaster

October 28, 1987

William L. Roper, M.D., Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C., 20201

Re: Hospital-Specific Medicare
Mortality Data
Community Hospital of Lancaster
#39-0068

Dear Mr. Roper:

We have carefully reviewed the hospital-specific mortality data for Medicare patients in 1986 which was sent to us with your letter of September 26, 1987.

In a review of the validity of the raw data, we found that 10 out of the 108 deaths reported for Community Hospital of Lancaster patients reflected errors in the reported age of the patient. In one instance, a case which was reported in the "low risk category" reflected an incorrect prinicipal diagnosis. The correct diagnosis in this case would have classified it in the "high risk category." All other data was correct.

The overall actual mortality rate for Medicare patients of Community Hospital of Lancaster was 10% which is at the low end of the range of predicted mortality rates. In 74 cases out of 108 (69%), the patient's chart included DNR (do not resusitate) orders. It is the policy of this Hospital to pursue aggressive treatment modalities, even though the patient or family member has made this decision. However, this factor places this high percentage of reported deaths in the "expected death category."

In 68 out of 108 cases or 63%, the patients had multiple underlying ailments which, of course, would increase the incidence or expectation of death. The average age of the reported mortalities for this Hospital was 77 and it is reasonable to believe that the mortality rate for this age category would be high.

We are very aware that this data relates only to Medicare patients and, therefore, is not representative of all patient categories. We have utilized the data to conduct a further review of each case, and are satisfied with the outcome.

While Community Hospital of Lancaster does not oppose HCFA's release of this data, we would certainly be remiss if we failed to point out that we do not believe that there is a valid relationship between this specific mortality data and the quality of health care provided by this or any institution. We support the effort to progress toward the provision of comparative quality data, and, hope that your communication with the release of this information will clarify its limitations.

Sincerely,

Joanne Judge Kiser
President

JJK/eg

Conemaugh Valley Memorial Hospital

1086 Franklin Street Johnstown, PA 15905-4398

Medicare Provider Number: 390110

RESPONSE TO HCFA MORTALITY DATA

Conemaugh Valley Memorial Hospital (CVMH) is a 450 bed community teaching hospital with several residency training programs, a diploma school of nursing and various allied health training programs. Among the services available at CVMH are a Regional Trauma Center (designated by the Pennsylvania Trauma Systems Foundation), a helicopter service as a satellite of Allegheny General Hospital's Life Flight program, a Regional Intensive Care Nursery and acute psychiatric services.

The mortality data were reviewed and found to represent an accurate listing of Medicare patients who either died at CVMH or within 30 days of their last 1986 admission to CVMH. However, it should be pointed out that mortality rates, by themselves, do not measure quality or serve as the sole indicator of hospital performance. An appropriate assessment of the quality of care provided at an institution is dependent upon many variables. Mortality data must always be adjusted to reflect measures of severity (i.e., how ill the patient was at the time of admission) and should only be used to guide and direct peer (physician) quality review activities.

A comprehensive, ongoing program to monitor and evaluate the quality of patient care provided is operational at CVMH. The Board of Trustees, Medical Staff and Administration are committed to the delivery of high quality patient care as the primary mission of our institution.

CORRY MEMORIAL HOSPITAL
612 WEST SMITH STREET, CORRY, PENNSYLVANIA 16407
814-664-4641

October 23, 1987

Dr. William Roper
Administrator
Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

In regard to the planned publication of Selected Mortality Information regarding Corry Memorial Hospital, provider #390005, the following information is submitted.

The data used by HCFA indicate that a total of 63 Medicare patients admitted to Corry Memorial Hospital died within 30 days of admission. Of these, 49 died while still a patient, while 14 died after discharge. HCFA indicates 528 cases while our own records indicate that 957 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries. Our own records also indicate of the 63 Medicare patients who died within 30 days of admission, 1 was transferred to another acute care facility and expired there. It is impossible to determine the percentage of the Corry Memorial hospital patients dying after discharge as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in this analysis.

In none of the diagnostic categories, does Corry Memorial Hospital's actual mortality rate fall outside of the range of the predicted mortality rate. 100% record review was performed however and below is a summary of the findings.

CA Cancer - High Risk

HCFA reports a total of 22 cases with 6 cases expiring at CMH (27% mortality rate with the range from 10-47%). The average age of these patients was 75. Referral sources included 2 from a nursing home and 4 from home. Five were a "no code" status on admission. Each case reviewed revealed complicating medical conditions. Each with a primary site of carcinoma and metastases to such places as lung, brain, liver or bone.

CE Cerebrovascular Accidents - High Risk

HCFA reports a total of 31 cases with 12 cases expiring at CMH and 2 cases expiring after discharge (45% mortality with the range from 16-48%). Records were reviewed. Of the 12 cases expiring at CMH, 9 cases were a "no code" status. Referral sources include 3 from a nursing home, 1 from boarding home and 8 from home. Of the 2 cases which expired after discharge, both patients were discharged to a nursing home and one was a "no code" during the admission here. The average age for all deaths was 81. All cases reviewed revealed complicated medical conditions with the principal diagnosis of CVA and co-existing conditions such as acute myocardial infarction, pneumonia and chronic heart and cerebral disease.

HM Severe Chronic Heart Disease - High Risk

HCFA reports a total of 47 cases with 10 cases expiring at CMH and 3 cases expiring after discharge (28% mortality with a range from 12-36%). An error in coding has been identified with one patient. The 428.9 Heart Failure, Unspecified should be 482.9 Acute Bacterial Pneumonia. Excluding this patient brings the mortality rate down to 26%. Of the 9 cases expiring at CMH, 6 were a "no code". Referral sources included 2 nursing home and 7 from home. Of the 3 expiring after discharge, one was transferred to a skilled nursing facility. All cases reviewed had complicated medical conditions including such co-existing conditions such as carcinoma, acute renal failure, COPD, anemia and diabetes. Average age was 78.

HS Severe Acute Heart Disease - High Risk

HCFA reports a total of 21 cases with 7 cases expiring at CMH and 2 cases expiring after discharge. One patient was transferred to another hospital and it has been verified that she expired there. Eliminating this patient from this category decreases the reported mortality rate from 43% to 38% with the range from 21-62%. Of the 7 patients who expired at CMH, 3 were a "no code". Referral sources include 1 from a nursing home, 1 from boarding home and 5 from home. Average age was 88. The one patient expiring after discharge was transferred to a skilled care facility. The majority of patients reviewed were short lengths of stay (5/8 were 1 day LOS). Three were "no code" on admission. The common complicating condition was cardiogenic shock.

RN Renal Disease - High Risk
HCFA reports a total of 2 cases with 1 case expiring at CMH (50% mortality rate with a range of 0-90%). The patient was 81 years old, was a "no code" on admission and expired due to acute renal failure and pneumonia.

GI Gastrointestinal Disease - Low Risk
HCFA reports a total of 40 cases with 1 case expiring at CMH (3% mortality rate with a range from 2-19%). Patient was 76 years old, a no code on admission who developed pneumonia and expired.

HL Low-Risk Heart Disease - Low Risk
HCFA reports a total of 66 cases expiring after discharge (3% mortality rate with a range of 1-13%). Both patients were high-risk patients in view of previous cardiac histories and complicating co-existing medical conditions. Average age was 77.

GU Urologic Disease - Low Risk
HCFA reports 14 cases with 1 case expiring (7% mortality rate with a range from 1-38%). Patient was 84 years old, a no code and suffered from co-existing conditions of pneumonia, CHF and cardiopulmonary arrest.

UN All Other Conditions - Low Risk

HCFA reports 1 case expiring at CMH and 2 expiring after discharge. All 3 were "no codes" with multiple co-existing complicating conditions such as metastatic carcinoma, diabetes, CHF, colostomy and old CVA. The 2 patients expiring after discharge were both transferred to a nursing home. Average age was 75.

As you can readily determine from this information and analysis, many of the patients who died at Corry Memorial Hospital had severe and debillitating comedical problems. In all of the categories, the hospital was well within normal expected and predicted ranges, and certainly, in a large majority of the cases, the patient, and/or family wishes were respected with regard to "no code", or "do not resuscitate" status.

Thank you for the opportunity to respond to the information.

Yours truly,

Raymond A. Graeca
President
Corry Memorial Hospital

RAG/bas

Crozer-Chester Medical Center • 15th Street & Upland Avenue • Upland, Chester, Pa. 19013-3995 • (215) 447-2000

October 23, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospaital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Thank you for forwarding the HCFA Mortality data for Crozer-Chester Medical Center. We appreciate the opportunity to review the data prior to its publication in the Federal Register.

Enclosed are our comments to be included in the Federal Register when the HCFA data is released. While we endorse the concept of a fully informed public, we are concerned that the HCFA data will be perceived by the public as a definitive measure of quality care in an individual hospital. We would encourage HCFA to continue its efforts to develop a statistical model that will allow for the complex issues which effect quality patient care and which can be used by consumers in selecting appropriate health care services.

Thank you again for the opportunity to comment on this data.

Sincerely yours,

John C. McMeekin,
President

attachment

Crozer-Chester Medical Center • 15th Street & Upland Avenue • Upland, Chester, Pa. 19013-3995 • (215) 447-2000

Medicare Provider Number #39-0180

HCFA MORTALITY DATA

COMMENTS:

Crozer-Chester Medical Center was below the range of predicted mortality in two of the sixteen diagnostic categories. (1) low risk heart disease and (2) severe acute heart disease. Crozer-Chester Medical Center's mortality rate was zero in two categories, (1) ophthalmologic disease and (2) gynecologic disease. Crozer-Chester Medical Center was within the predicted range in all other diagnostic categories.

HCFA clearly states that their data "is not a complete measure of the quality of care". In fact, the data includes only a portion of the total Medicare patient admissions. HCFA reviewed 2,396 admissions while Crozer-Chester Medical Center actually had more than 4,000 Medicare admissions in 1986. Had the study included all patient admissions, Medicare and non-medicare, the actual mortality rate would be 3%, not the 12% reported. We would encourage a more comprehensive reporting of patient outcomes in future years.

The HCFA data is also flawed due to its failure to adjust for the condition of the patient at the time of admission. According to HCFA's model, patients transferred from other hospitals to Crozer-Chester Medical Center are counted in Crozer-Chester Medical Center statistics. As a major teaching Medical Center, Crozer-Chester Medical Center provides critical services to patients that are not available at many hospitals. These services include a Trauma Center, Burn Treatment Center, Renal Dialysis, and Radiologic Cancer Treatment. Last year, more than 450 patients were transferred from other hospitals to Crozer-Chester Medical Center.

The Medical Center's own Quality Assessment Department monitors and evaluates the treatment that patients receive to assure that the highest possible standards are met.

Crozer-Chester Medical Center is a voluntary, non-profit Medical Center whose services are available to anyone in need.

DCMH

Delaware County Memorial Hospital 501 N. Lansdowne Ave. Drexel Hill Pa. 19026 (215) 284-8100

October 21, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Attention: William L. Roper, M.D., Administrator

I. INTRODUCTORY COMMENTS

While Delaware County Memorial Hospital recognizes and is in full agreement with the intent to provide useful information to consumers, the media, and other audiences, our overriding concern surrounding the release by HCFA of hospital-specific mortality data is the high likelihood of engendering public misconceptions. We share the overwhelmingly held position that mortality rates are not good indicators of hospital performance and quality of care. While we support the full disclosure of all valuable information to the public, we do not support the release of statistical information which fails to properly represent the total picture on a very complex subject. It is our belief that such activity is a grave disservice to the public when highly emotionally charged issues are not responsibly or accurately presented. Conclusions about quality of care cannot be derived from raw mortality rate and length of stay statistics. A case by case analysis is required which accounts for every pertinent variable.

Delaware County Memorial Hospital's own Quality Assurance Department monitors quality of care for every patient, in every department, seven days a week, twenty-four hours a day. DCMH has done an analysis on a regular ongoing basis of every death in this institution for well over a decade. The analysis and interpretation of hospital death rate data is only a part of a more comprehensive quality management program. At Delaware County Memorial Hospital, quality of care is a top-ranking, management function reporting to the highest organizational level.

II. COMMENTS ON DCMH DATA

Delaware County Memorial Hospital has reviewed HCFA's data compiled to indicate our actual mortality rate along with ranges of predicted mortality rates. HCFA has included on their case listing 34 patients who did not die at DCMH, which accounted for 11% of the deaths HCFA reported to DCMH.

Preliminary analysis of available discharge information on these 34 patients did not yield any unexpected findings. Although the specific cause of death was not available during our review, we were able to establish that 47% of these patients died at home and 23% died in Nursing Homes. Specific information was not available for the remaining 23%.

Delaware County Memorial Hospital's internal Quality Assurance program reviews 100% of inpatient deaths. These reviews are conducted by physicians in each individual Medical Staff Department. Correlation of the QA review findings with HCFA's information did not demonstrate any unexpected outcomes. In addition, Keystone Peer Review Organization (KEPRO), has also reviewed a sampling of Medicare patient deaths for 1986, specifically, 100% of all patients who died after having an acute myocardial infarction, which is a diagnosis included in HCFA's release. KePRO did not identify to DCMH any unexpected patient deaths for that period.

The high volume of patient deaths for diagnoses of cancer is not unlikely, since DCMH has a 24-bed nursing unit devoted exclusively to the care of the oncology patient.

While the range of mortality rates reported by HCFA relative to DCMH's patients were all within acceptable limits; in fact, all of our actual mortality rates were well below the range of predicted mortality rates for our institution, DCMH will continue diligent monitoring of all patient deaths in accordance with existing QA programs and policy. In addition, we will continue to utilize KePRO data to augment internal review efforts in an effort to identify potential problems.

The Board of Directors, administration, and management of DCMH is pleased to note for the record that HCFA's data base - as furnished to us - bears out what we already knew with regard to patient mortality rates at DCMH.

III. SPECIFIC OBJECTIONS TO THE HCFA MULTIPLE REGRESSION MODEL

There are major limitations with regard to HCFA's mortality rate model. Differences between actual and predicted mortality rates may result from factors not accounted for in any way by the model such as: patient populations treated, severity and case mix, and hospital characteristics. Although the model does account for such variables as age, sex, and some comorbidities which were not accounted for by the model in early releases of data by HCFA, this is still not the complete picture. Such factors as

condition on admission, complications during stay, and, of course, overall severity indexes are not factored into these statistics at all. While the model does account for seven chronic underlying ailments (comorbidities) other comorbidities are not considered.

The 467 DRGs and the current classification system did not account for severity of injury or illness for very good reasons. DRGs were set up simply as a financial payment mechanism - never intended to serve as a basis for quality of care reviews, or for conclusions with regard to specific institutional levels of quality of care.

We strongly urge HCFA to accompany any data release with clearly worded sets of interpretive precautions for consumer audiences who will be attempting to draw significant conclusions from these data.

The following are the specific objections to the HCFA Model:

1. Mortality rate data for the Medicare population are not indicative of the hospital's overall mortality rate experience. If this fact is not clearly articulated to consumer or media audiences, it is our belief that the publication of such data will constitute very misleading reporting. Typically, Medicare populations are both older and sicker. DCMH wishes to note for the record that over 60% of its patients are from the Medicare population - a percentage well above the national average.

2. Hospitals with small numbers of Medicare patients in various categories are more likely to appear as outliers in actual vs. predicted comparisons.

3. The model does not adequately account for patient severity. Although complications and comorbidities are considered, the model doesn't fully explain differences in patient condition upon admission, nor their particular prognosis for a favorable outcome.

4. Hospital rates being released by HCFA include all deaths occurring outside DCMH within 30 days of admission to DCMH. This presents a highly misleading picture since deaths occurring outside the hospital may, in fact, be due to causes totally unrelated to a hospital stay, e.g., automobile accident, homicides, etc.

5. By selecting the last of multiple admissions for a patient and using this as a basis for compiling data, it is highly likely that HCFA is overstating a hospital's given mortality rate.

DCMH

6. Mortality rates are likely to be higher for those hospitals accepting critically ill patients from other hospitals, and lower for hospitals which more frequently transfer critically ill patients.

7. Additional factors not included in the model which might explain variance include, but are not limited to, hospital characteristics; admissions from nursing homes; admissions from emergency departments; patient's general health status; stage of the patient's illness; patient's psychological condition and overall family support.

In conclusion, the statistical model developed by HCFA measures the relationship between a very limited number of patient characteristics and the risk of death. At best, the model offers crude estimates of the expected risk of death. The reliability of the model is unknown, and, therefore, inappropriate for use as a national "educational" campaign.

Sincerely

Richard D. Thomas
President

Robert G. Trout, M.D.
Director/Medical Affairs

RDT:RGT:nk

1100 Grampian Boulevard • Williamsport, PA 17701 • (717) 326-8181

COMMENTS ON THE HCFA MORTALITY DATA
Divine Providence Hospital
Williamsport, Pennsylvania
Provider Number : 39-0075

Data Verification

The data published by HCFA indicates the number of Medicare admissions to Divine Providence Hospital was 1,584 for the year 1986. Of these admissions, 161 of the Medicare patients died within 30 days of the admission date.

Our own records indicate 3,075 Medicare admissions occurred in 1986. Presumably the discrepancy reflects the multiple admissions of Medicare beneficiaries as the Department of Health and Human Services is only reporting one admission for each beneficiary. We have no method available to accurately verify the number of Medicare admissions as reported by Health Care Finance Administration.

Our own records indicate that of the Medicare patients who died within 30 days of admission, 38 of those patients were alive at the time of discharge. It is impossible to determine if in fact any of the 38 patients are in fact alive, as information concerning death after discharge is not included in the patient's medical record. Our records do indicate, of these 38 patients, 13 of them were being treated for cancer.

It should be noted Divine Providence Hospital does have an active Cancer Treatment Program and an active Renal Dialysis program. Both of these programs treat chronically and severely ill patients.

Sister Jean Mohl

Sister Jean Mohl, SCC
President

DOYLESTOWN HOSPITAL

595 WEST STATE STREET
U.S. ROUTES 202 & 611 BYPASS
DOYLESTOWN, PENNSYLVANIA 18901
215-345-2200

JAROMIR MARIK, F.A.C.H.E.
PRESIDENT & CHIEF EXECUTIVE OFFICER
215-345-2220

October 13, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
200 Independence Avenue, SW
Washington, DC 20201

Dear Dr. Roper:

This will acknowledge receipt of your September 21, 1987 letter which had attached selected mortality information on Medicare patients treated by Doylestown Hospital during the calendar year 1986. As per your letter, we have reviewed the information you have submitted and respectfully request that a copy of this letter be attached to Doylestown Hospital's statistics when they are published by your Department some time in December 1987.

After review of the information you provided to us, we offer the following comments on your proposed release of mortality data:

1. The 16 diagnostic categories were broken down into two areas: "high risk" and "low risk". In reviewing all of the patient charts for those patients in the "low risk" area, we found that all of the patients had "high risk" illnesses which were not listed as the principal diagnoses. As you know, the computer model used to designate these diagnoses will accept only a limited number of co-morbid conditions and therefore does not offer a complete picture, nor in some instances an accurate picture, of the patient's condition. Therefore, even though there were 45 deaths attributed to the six categories in the "low risk" category, their charts revealed that they were all "high risk" patients.

2. The statistical model utilized by your Department to predict the range of mortality rates has not been tested, has not been proven, and is extremely limited in explaining differences in mortality rates between hospitals. It does not consider the patient's health status at the time of entry into the hospital or the lack of availability of family support. In short, it is not valid, as you point out in your letter, for determining the quality of care rendered in individual hospitals.

3. The total number of Medicare patients reported on your list (2140) does not include multiple admissions of the same patients. Therefore, the total number of Medicare cases as reported by you is understated and would therefore reflect a higher overall actual mortality rate than is really the case. Our records reflect that we have discharged 2840 Medicare patients during the calendar year 1986. That is a difference of 700 patients or 32.7% more patients than you reported. Based on the number of deaths attributable to your figures, this would reduce our actual mortality rate from 12.2% to 9.2%.

    a. However, in reviewing our records, we have identified 17 more Medicare inpatient deaths than the number you reported. Eight of these deaths were not picked up by you because of the criteria of not counting deaths occurring more than 30 days following admission to the hospital. We do not know why the other nine deaths were not picked up on your records. Adding these 17 deaths to the number reported by you and dividing them by the total number of Medicare patient discharges would produce an overall actual Medicare mortality rate of some 9.8% which is well below the 12.2% reported by you.

4. We are somewhat concerned with the fact that your statistics include patients who died after discharge from the hospital. Of the total number of deaths reported by you, some 20% occurred after discharge from the hospital. We have attempted to ascertain the reason for deaths after discharge. Except for those individuals discharged to our Hospice Program, we have been unable to verify the reasons of death on these patients.

5. During 1986 we had 763 Medicare patient charts reviewed by the Keystone Professional Review Organization. This represents a total of 26.9% of the Medicare discharges for that year. Out of all of those records reviewed, we had no incidents cited by KePRO for quality of care.

We appreciate the opportunity to review and comment on the information prior to public release. As you no doubt understand, this review has taken considerable time and effort on the part of many hospital staff members. In light of your statements that ". . . the information on its own is not a complete measure of quality of care at an individual hospital" and ". . . we cannot and do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or

to make comparisons among hospitals", we question why this information is being released. Making this information available to KePRO to be used in conjunction with ongoing review of activities can be of assistance in determining areas of concern. This information by itself is of no value to anyone.

Sincerely,

J. Marik
President-CEO

M:B:dhb

cc: Ms. Kelly M. Grotzinger, HAP
Mr. Charles A. Daly, DVHC
Mr. James C. Brownlow, II, Doylestown Hospital

DuBois Regional Medical Center

Partners in Progress . for Life

October 23, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C.

RE: Comments on HCFA Mortality Data - Medicare Provider #39-0086

Dear Doctor Roper:

The data used by HCFA indicates that a total of 1,804 Medicare patients were admitted to the DuBois Regional medical Center in calendar year 1986. Of these, 211 died within 30 days of admission. HCFA data also shows that 166 died while still a patient in the Medical Center and 45 died after discharge. Using the HCFA criteria to exclude readmissions, our records indicate that 1,941 Medicare admissions occurred in calendar year 1986 and that 221 patients died within 30 days of admission. Our records further indicate that 177 died while still a patient in the hospital and 44 died after discharge. It is impossible for us to totally verify the accuracy of the figures regarding patients who died after discharge as information concerning death after discharge is not included in the patient's medical record. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis. In all of the diagnostic categories, DuBois Regional medical Center's actual mortality rate falls inside the range of the predicted mortality rate. In 10 of the diagnostic categories, the Medical Center's actual mortality rate is lower than that indicated by HCFA. In 3 of the diagnostic categories, the Medical Center's actual mortality rate is higher than that indicated by HCFA although still well within the range of predicted mortality rates. A case-by-case verification of the data revealed numerous errors regarding principal diagnosis, admission and discharge dates, and in-hospital versus post-discharge deaths. We are concerned that deaths counted in the 1986 mortality data but which occurred in a subsequent year not be included again in 1987 mortality data.

The inaccuracies in HCFA's data for DuBois Regional Medical Center raises questions concerning the overall accuracy of the mortality data including the range of predicted mortality rates.

Thank you for the opportunity to comment on the data.

Sincerely yours,

Peter W. Monge,
Chief Executive Officer

PWM/mkf

P.O. Box 447
DuBois, Pennsylvania 15801
Telephone (814) 375-4321, East Unit
(814) 371-2200, West Unit

Writer's Direct Dial No.: 375- 3385

Ephrata Community Hospital

The Tree of Life is Wellness
Medicare provider #390225

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Attention. William L. Roper, M.D.

Dear Doctor Roper.

In response to HCFA's plan to publish hospital specific mortality statistics, the following additional information is submitted. Although our mortality statistics were within national averages, we conducted further review to verify the HCFA statistics. (The only statistics not verified were deaths that occurred after discharge from the hospital.) Providing high quality of care is of the utmost concern of our governing board, management team and medical staff. Mortality statistics are only one part of our quality assurance program and are used primarily to suggest areas for review to determine if a quality problem exists. When a problem is identified, corrective action is promptly taken. While we believe the public should have access to hospital quality of care information, we also believe the public should be aware of the limitations of the HCFA mortality statistics in assuring quality of care.

It should be noted that the principal diagnoses listed in the data do not take into consideration many patient factors. For example, a co-existing condition of diabetes, emphysema, or congestive heart failure would make it more difficult to treat a particular illness than it would in an otherwise healthy individual. The statistics do not reflect all possible co-existing conditions or complicating factors in the course of treatment.

Further, the age of the patient is a salient factor in the number of co-existing condition that can be expected to occur. The older the patient, the more comorbid conditions can be expected. It is interesting to note that 36 (34%) of our 107 deaths were patients over 80 years old, where one would expect more comorbid conditions than with younger patients.

Third, the statistics do not incorporate severity of illness. Severity is "the measurable degree of the potential for failure of one or more vital organs." Therefore, the key elements for choosing a methodology to measure quality of care is the ability to measure patient severity to adjust for patient outcomes. Henceforth, one cannot attribute a patient's death to a hospital based only on the fact that the patient died within 30 days of the last hospital admission. This method cannot measure the quality of care provided by the hospital or by the patient's attending physician.

Martin Avenue • Ephrata, PA 17522-1002
(717) 733-0311

Additionally, the course of a patient's illness is affected by a variety of circumstances that have nothing to do with the care received as an inpatient. In addition to the above, those circumstances include, but are not limited to, the patient's living conditions, medical care prior to hospitalization, compliance with prescribed outpatient treatment, timeliness of the hospital admission, and patient's personal health habits.

Further, it is important to note that a one-year sample of a hospital's mortality statistics for any specific DRG could be very misleading as a quality indicator to the public because of the number of cases treated during that year. Hypothetically, a hospital may have three mortalities out of ten cases within any specific year, but for the prior years, perhaps no deaths had occurred in 20 cases. Obviously, it would be misleading to the public to make an inference that 30% of such cases end in mortalities, where the reference point should be a multiple year average which would indicate 10% to be the appropriate rate. Although our hospital's statistics did fall within all the norms, I do believe an average over a longer period of time would be of more benefit to consumers.

Lastly, in regard to the 22 patients who allegedly died after discharge from our hospital, it should be noted that this statistic is not an accurate measure of quality of care received during the hospital stay. Consider the situation of a terminally ill patient who needs to be admitted for treatment of an acute condition and then is discharged to home upon resolution of the acute condition. The patient's prognosis is still terminal, but admission was necessary for the acute condition. Also consider those patients who are terminal and request to go home to die rather than die in the hospital. Quality of care received during the hospital stay cannot be ascertained without investigation of the circumstances of each individual case. Numbers of deaths alone do not measure quality of care received.

In conclusion, I want to stress the importance for HCFA to develop more meaningful statistics to accurately measure the quality of care of all Medicare patients, not just those who died. Severity of illness must be incorporated into the quality measurement, for without it, the statistics have little meaning. The American Hospital Association and Joint Commission on Accreditation of Healthcare Organizations are investigating methods of evaluating quality of care for all patients that rely on measures other than mortality rates, and we look forward to the results of their efforts. The consumer has a right to useful information on the quality of hospital care. Our hospital ensures high quality care to all patients through the ongoing collection, monitoring and analyzing of health care data. When problems are identified, solutions are implemented and followed up to be sure the problem is solved, We are, and will continue to be, dedicated to providing the best in up-to-date, high quality care to those we serve.

Sincerely,

John M. Porter, Jr.
President

JMP/bt/jfd

EPISCOPAL HOSPITAL
Front Street & Lehigh Avenue • Philadelphia PA 19125-1098 • (215) 427-7000

Administrative Offices

Episcopal Hospital
Front Street and Lehigh Avenue
Philadelphia, PA 19125

Comments on HCFA MORTALITY DATA

The data supplied by HCFA indicates that a total of 1,342 medicare admissions occurred at Episcopal Hospital in 1986. Of this number, 186 patients died within 30 days of admission (174 died while still a patient in the hospital; 12 died after discharge). Episcopal was able to verify the inpatient deaths but unable to verify those deaths which occurred after discharge nor whether the cause of death was related to the condition of the patient at time of discharge. Episcopal's own records indicate that 2,473 medicare admissions occurred in 1986. Presumably, this discrepancy is due to the multiple admissions of individual patients to various hospitals.

The diagnostic categories for each patient listed by HCFA are correct. The hospital's actual mortality rate falls within the range of HCFA's predicted mortality rate in all diagnostic categories. However, mortality rates do not measure the quality of care a patient received. The data does not take into account the patient's severity of illness whether the patient was transferred to a hospital from a nursing home, whether the patient was receiving treatment at home prior to admission, whether the patient had a terminal illness or the patient's health status in general. Each patient's chart would have to be reviewed before making appropriate conclusions about the quality of care rendered at Episcopal.

HCFA publishes Mortality Rates by diagnostic category regardless of the number of admissions reviewed. For example, Episcopal's highest mortality rate (55%) is for the diagnostic category "Sepsis". The actual number of cases treated under this heading is eleven. This number is too small to yield statistically valid information.

Finally, the data is not all inclusive as it applies only to medicare patients.

The following factors are specific to Episcopal Hospital; they influence mortality rates and should be kept in mind when reviewing Episcopal's data:

- Episcopal offers advanced specialized services in Cardiology such as cardiac catherizations, PTCAs and open heart surgery. The Hospital receives a significant number of referrals from other hospitals for these services.

- In 1986, 38% of medicare admissions (940 patients) were admitted to the Hospital from the Emergency Department. These patients usually are more acutely ill and have a more guarded immediate prognosis than an electively scheduled patient.

- A skilled nursing facility is located on the grounds of Episcopal Hospital. These patients are admitted directly to Episcopal when they require an acute level of care. Nursing home patients usually have multiple and often chronic medical problems.

- Episcopal's primary service area contained a significant number of households listed below the poverty level in the 1980 U.S. Bureau of the Census. Serious chronic health problems are more prevalent among the poor than among the general population. In addition, many of the poor have difficulty obtaining needed services and are less likely to have access to a primary physician or to seek timely and continuous treatment for their chronic health problems. Their care is fragmented and they are generally more seriously ill when they finally seek treatment.

Episcopal has a Quality Assessment Committee which routinely screens patient's charts for possible problems in patient care Mortality Data are only a part of the Hospital's Comprehensive Quality Assessment Program.

Evangelical Community Hospital
ONE HOSPITAL DRIVE / LEWISBURG, PENNSYLVANIA 17837

September 24, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Washington D.C. 20201

Dear Dr. Roper:

I am writing to you to provide my comments to the mortality rate study you are planing to distribute in December of 1987. My objection is not to the technical accuracy of your study, but rather to the insinuation you make by the action of initiating a study such as this. The insinuation made by this study is that hospitals cause people to die. While I applaud your attempts to measure the quality of care in hospitals, I do not believe that this is the correct approach. A hospital would appear either favorable or unfavorable on your list by being fortunate or unfortunate to have treated a patient within 30 days of his or her death. Should a hospital wish to appear more favorable on your list they would be wise to screen patients prior to admission and only admit patients with a low probability of death. Obviously this is totally contrary to the mission of hospitals.

I fear that the insinuation made by your action in undertaking this study only adds fuel to the fire of rising expectations caused by many of the television medical melodramas. I am certain that as a physician you do not agree with the theme of these melodramas, and that if a physician or hospital were only good enough then no one would ever suffer permanent pain, illness, or die.

I believe the indepth survey approach of measuring quality undertaken by the joint commission on accreditation of health care organizations is a much more viable approach towards measuring quality in hospitals.

Yours very truly,
William F. Stoltzfus
Vice President, Treasurer

WFS/pah

717/523-2500

EYE & EAR HOSPITAL OF PITTSBURGH
230 Lothrop Street Pittsburgh, Pennsylvania 15213-2592

October 26, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
6325 Security Boulevard
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for providing Eye & Ear Hospital of Pittsburgh the opportunity to review and comment on the mortality rate data pertaining to this Hospital. One of the eleven patients listed by HCFA was diagnosed as having medically uncontrolled, chronic open angle glaucoma and a trabeculectomy was performed on August 14, 1986. He was discharged August 16, 1986 and died from a cardiac arrest on August 31, 1986. His death was in no way related to his treatment at Eye & Ear Hospital of Pittsburgh and we, therefore, take exception to its inclusion in our mortality statistics.

For your records, this patient was Patient No. [redacted] with a surname of [redacted] The Hospital ID No. is 390143. I respectfully request that this death be taken off the Hospital's statistics because it is totally unrelated to the reason for admission or treatment received by the patient.

Sincerely,

David J. Tkach
Chief Financial Officer

DJT/pjh

FRANKFORD HOSPITAL
Philadelphia, PA 19114

John B. Neff, F.A.C.H.E., President

Dedicated to your well-being

October 26, 1987

RE: Frankford Hospital HCFA Mortality Rates
Medicare Provider #390115

Members of Frankford Hospital's administrative and medical staffs have analyzed the HCFA Mortality Statistics and reviewed the medical record documentation to evaluate the appropriateness and quality of care provided. Although our rates fell well within the expected ranges, we believe it useful to comment on a number of aspects of the data.

We agree that a knowledgeable public, informed as to the cost and quality of health care provided, can make a better decision in choosing an appropriate health care provider. However, mortality rates are not satisfactory or sufficient indicators of quality of care. They can do no more than identify potential areas for further review. The following are cited as the bases for this statement and result from our own hospital specific data and case review:

I. Informational Errors

A. Data Inaccuracies

[redacted]

These two patients on the HCFA list appear to be one and the same. Both have the same HIC number [redacted]. The date of admission, date of discharge, and date of death are identical. The principal diagnosis and principal procedures are also the same. Frankford Hospital has a medical record for patient [redacted] but no information at all on patient [redacted] Therefore, it appears that one death, not two, should have been noted.

[redacted]

This patient expired on November 5, 1986, not November 30, 1986, as listed.

[redacted]

This patient expired on February 17, 1986, not February 19, 1986, as listed.

[redacted]

This patient expired on November 8, 1986, not November 30, 1986, as listed.

B. Sampling Errors

[redacted]

This patient was on the Frankford Hospital Mortality List, but he died at Graduate Hospital on February 9, 1986.

C. Methodology Issues

[redacted]

This patient was admitted to and discharged from Frankford Hospital in 1986 but expired at Abington Hospital on January 9, 1987

[redacted]

This patient was admitted to and discharged from Frankford Hospital in 1986 and was transferred back to a nursing home. On December 30, 1986, this patient expired in the Emergency Room at Holy Redeemer Hospital.

II. Problems in HCFA Model and Data Presentation

A. Categorization Issues

Principal diagnosis was utilized by HCFA to sort patients into sixteen categories; ten high risk and six low risk categories. This method considers only one diagnosis or medical condition, the reason for admission, for purposes of grouping patients into categories. However, many Medicare patients have other medical conditions which require treatment or impact on the hospital stay which were not considered in categorizing patients. Therefore, the reported level of risk, particularly in the low risk categories, does not take into account all conditions which truly determine the patient's risk level.

Further, it is important to note that the principal diagnosis may not be at all related to the cause of death.

B. Severity/Chronicity Issues

There is no mechanism in the HCFA Model to account for severity or chronicity of illness. Review of the Frankford Hospital mortality data demonstrated that some patients were so ill upon admission that they could not have been expected to survive. Further, other patients were suffering from longstanding conditions such as chronic lung and/or heart disease. By their very nature these chronic conditions are debilitating and ultimately will cause or contribute to the death of an older patient.

The statistics do not consider that many of these patients have had multiple hospitalizations nor do they consider that several of these patients were admitted from and transferred back to skilled nursing facilities. And finally, the data do not reflect that some patients with chronic or severe conditions instructed the hospital and physicians not to take any extra-ordinary treatment measures.

In summary, the public is entitled to valid and reliable information about the quality of health care provided. However, it should be noted that the methods utilized by HCFA are still in the developmental stage and the data being published are limited in their ability to indicate quality.

Geisinger

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

Enclosed please find comments relative to the 1986 Health Care Financing Administration mortality data scheduled to be released in December, 1987.

The 1986 data is more complex than previous releases. We are concerned that the mortality data will be easily misinterpreted, causing confusion and apprehension among Medicare beneficiaries and the public in general.

Thank you for the opportunity to comment on this data.

Sincerely,

/Henry Hood

Henry Hood, M.D.
President

HH:ck

Enclosure

Geisinger Medical Center
Danville, Pennsylvania 17822
(717) 271-6211

COMMENTS ON THE HCFA MORTALITY DATA
Geisinger Medical Center
Medicare Provider No. 390006
Danville, Pennsylvania

DATA VERIFICATION

The data used by the Health Care Financing Administration (HCFA) indicates that a total of 464 Medicare patients admitted to 390006 hospital died within 30 days of admission. Of these, 372, patients died during hospitalization, while 92 patients are reported to have died after discharge. We cannot verify the number of Medicare patients treated or the number of patients dying after discharge. The disposition of patients following discharge is not routinely recorded in the patient's medical record.

Without detailed information concerning the data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the data used in your analysis.

INTERPRETIVE REMARKS

1. While the demographic and co-morbidity factors included make the HCFA data more complex, they are not adequate for analyzing outcomes. The inability to factor individual patient severity makes the resulting data unusable for purposes of comparison.

2. The data does not adequately reflect the complexity of cases seen.

3. A disproporationate number of cases are transfers from other hospitals; i.e., "HS Severe Acute Heart Disease", 43 of 79 mortalities (54%) were transfers from other hospitals. On average, one third of cases resulting in death were transferred from other hospitals - indicating that severely ill patients are referred to the medical center with expected higher mortality.

4. The grouping methodology used by HCFA distorts mortality for institutions treating severely ill patients. Providing for a severity of illness measurement will more accurately reflect predicted mortality.

UNIQUE SERVICES

As a tertiary referral center for a wide geographic area, our hospital treats unusually high concentrations of acutely ill patients in virtually every diagnostic group. Our specialty services attract significant volumes of complex cases. Our latest annual Medicare case mix index was significantly higher than other area hospitals.

RESULTS OF PRELIMINARY REVIEW

Results indicate mortality rates for all diagnostic categories fall within HCFA predicted ranges. However, it is emphasized that the HCFA data is not, in itself, a measure of hospital performance.

COMMENTS ON THE HCFA MORTALITY DATA
GEISINGER WYOMING VALLEY MEDICAL CENTER
WILKES-BARRE, PA 18711

DATA VERIFICATION

The data used by the Health Care Financing Administration (HCFA) indicates that a total of 175 Medicare patients admitted to 390270 hospital died within 30 days of admission. Of these, 148 patients died during hospitalization, while 27 patients are reported to have died after discharge. We cannot verify the number of Medicare patients treated or the number of patients dying after discharge. The disposition of patients following discharge is not routinely recorded in the patient's medical record.

Without detailed information concerning the data available to HCFA in computing the predicted mortality rate,, it is impossible to verify the accuracy of the data used in your analysis.

INTERPRETIVE REMARKS

1. While the demographic and co-morbidity factors included make the HCFA data more complex, they are not adequate for analyzing outcomes. The inability to factor individual patient severity makes the resulting data unusable for purposes of comparison.

2. The data does not adequately reflect the complexity of cases seen.

UNIQUE SERVICES

As a community hospital, our hospital treats a high percentage of patients admitted directly from nursing homes. Our review indicates that 34 of the 175 Medicare deaths were admitted directly from nursing homes.

RESULTS OF PRELIMINARY REVIEW

Results indicate mortality rates for 15 of the 17 diagnostic categories fall within HCFA predicted ranges. Two categories, gastrointestinal catastrophes, and renal disease; we fall slightly below the predicted range. However, it is emphasized that the HCFA data is not, in itself, a measure of hospital performance.

11th & Hamilton Streets
Lehighton, PA 18235
(215) 377-1300

Gnaden Huetten Memorial Hospital
A HealthEast Hospital

Dereck Marshall
President

October 23, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

Please see attached copy of our corrected hospital specific data representing Medicare mortalities for Gnaden Huetten Memorial Hospital, Lehighton, PA (provider #390194). Also, enclosed are our comments on the data generated by HCFA; interpretation of those statistics regarding our actual mortality rate vs. range of predicted mortality and evaluation of the degree of quality of care we have provided those Medicare beneficiaries.

Sincerely,

Dereck Marshall

Dereck Marshall
President

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

REVIEW OF HCFA STATISTICS

Please see corrected copy of mortality statistics.

[redacted] - actual date of death is 8/17/86
Correctly reported by hospital to HUP
Probable "typo" error by HCFA or their reporting source

[redacted] - our records and data file system show no listing of this patient
Incorrectly reported by HCFA as our mortality.

[redacted] - patient was transferred to St. Luke's Hospital, Bethlehem, PA. on 4/26/86 for continued acute care and expired thereafter.
Incorrectly reported by HCFA as our mortality should be accredited to St. Luke's Hospital statistics.

[redacted] missed mortalities by HCFA
see corrected copy for required patient information

No coding errors were found and all other patient data was correct as stated.

General Interpretive Comments

1. HCFA data does not measure quality which can only be evaluated through peer review not statistical comparisons.
2. HCFA data is not all-inclusive since only Medicare statistics were used and data was calculated using only deaths occuring within 30 days of the last admission (those deaths may be from unrelated causes; i.e. auto accident, other trauma).
3. Not all factors affecting the probability of death in a particular case, most notably being severity of illness, are included in the predictive model because information on them is not yet readily available (future mortality releases should incorporate the MedisGroups System). A difference between a hospital's actual and expected mortality rates cannot be definitely construed as reflecting high or low quality of care - the difference may result from factors not included in the model.
4. The smaller the # of admissions, the less reliable the statistics as the impact of random variation of outcome in individual cases is greater.
5. Data can be easily misinterpreted by the public causing unnecessary confusion - especially in view of not being able to provide all necessary factors influencing the mortalities.

HOSPITAL SPECIFIC COMMENTS

1. No mortalities were above or below the expected range values for our facility.
2. Deaths can be plausibly attributed to factors not considered in the HCFA model - for example, complications and comorbidities were present in the majority of cases.

3. Many Medicare beneficiaries were admitted for terminal care as the result of a metastatic process - death being an expected outcome of their disease.

4. Large majority of our patient population encompasses people with endstage cardiopulmonary disease complicated by other chronic conditions - again, death being an expected outcome.

5. 16 of our 85 mortalities occurred outside our facility - causes being of a cardiac nature or secondary to terminal disease (1 patient expired the day after discharge from our facility - she had refused any further evaluation or treatment despite recommendations for extensive cardiac work-up).

6. Our facility provides acute care services for 3 area SNF's. Admissions from those facilities accounted for 16% of our mortalities. Five (5) of our 16 outside deaths occured in extended care facilities (care provided in those facilities should be evaluated to reflect impact on mortality and determine if cause of death was related to previous hospitalization). 1 outside death occured in a boarding home setting. 1 patient expired in our E.R. (unsuccessful attempt at resuscitating for arrest). 1 patient committed suicide after a long history of mental illness.

7. 72 of our mortalities occured in the "high risk" categories as opposed to 7 in the "low risk" categories and the 6 cases in the "all other" section. Deaths in our "low risk" categories were attributed to terminal CA, unexpected CVA, hepatic encephalopathy 2° advanced liver disease, cardiac arrest, irreversible renal failure, respiratory failure.

8. 1 case in the "GI" category should probably have been coded differently by our Medical Records department - principal diagnosis should have been Pancreatic CA, thus placing that mortality in the "CA" category.

CLOSING COMMENTS:

Quality of care continues to be of the utmost concern to our hospital's governing board, management and medical staff. Corrective action will be taken, when necessary, to ensure a high degree of quality care. A hospital's mortality rate may fluctuate from year to year and for many legitimate reasons. Mortality rates therefore should not be used to guide consumer behavior.

GSH Good Samaritan Hospital
Pottsville, Pennsylvania 17901 (717) 621-4000

October 13, 1987

Medicare Provider Number: 39-0031

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

I would like to take this opportunity to comment on the HCFA mortality data. The data used by HCFA indicate that a total of 282 Medicare patients admitted to Good Samaritan Hospital expired within 30 days of admission during 1986. Of these, 49 died after discharge from the hospital. Our own records indicate that 3,765 Medicare admissions occurred in 1986. Presumably, the discrepancy reflects multiple admissions of individual beneficiaries in which only the last admission has been used in the HCFA statistics.

Although Good Samaritan Hospital falls within the predicted range of mortality rates in every diagnostic category, there are two categories which require comment. It should be known that the median age of our patients in the categories entitled "severe chronic heart disease" and "metabolic/electrolyte disturbances" is 80 years old.

In both categories, medical record review has demonstrated that these patients are mainly victims of end-stage chronic disease. These patients were admitted with severe comorbid conditions such as renal failure, coal miners' lung disease, atrial fibrillation, etc.

Thus, the HCFA statistics may not be an indicator of quality rendered during the patient's most recent admission, as much as, an indicator of the high quality of care which was repeatedly given, allowing these patients with severe chronic conditions to live to the age they did.

Sincerely,

Frederick J. Siembieda
President/Chief Executive Officer

em

GSH
THE GOOD SAMARITAN HOSPITAL

October 20, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

The Hospital reveiwed and verified their mortality data for discharges occurring during calendar year 1986. The local Social Security office verified deaths occurring outside the Hospital. As a result of both verifications, eleven (11) additional deaths in the diagnostic categories were identified. Assuming a similar distribution to that reported by HCFA, the additional 11 deaths would not be statistically significant.

The use of mortality data, in and of itself, is not a measure of quality of care. Rather, hospitals can use mortality as an element for further peer review activity.

Thank you for allowing us to comment on our data.

Sincerely,

Janet Simpson
Vice President, QA/RM

JS/jl
cc: Mr. Broderic
Joyce Dissinger

THE GRADUATE HOSPITAL
One Graduate Plaza, Philadelphia, Pa. 19146 • (215) 893-2000

October 27, 1987

Health Care Financing Office
Department of Health and Human Services
Attention: HSO-148 G.N.C.
P.O. Box 22676
Baltimore, Maryland 21201

Dear Sir:

The following information constitutes Graduate Hospital's response and comments to the scheduled H.C.F.A. press release of Medicare Mortality statistics in December.

As an overview, we wish to note that while the process itself is of value each year in bringing information to our attention and focusing some of our ongoing review efforts, it would be most useful if a consistent methodology could be established so that year-to-year comparisons are possible. We also recommend that the public should be made aware that a mortality rate is only a rough indicator of a need to look further. Graduate Hospital's Quality Assurance Program is designed to give a much more detailed report on overall quality of care and services. Mortality is only one of 50-75 potential screens the program uses to isolate and identify areas where improvement may be necessary. The differences between predicted and actual mortality rates is not necessarily a valid measure for quality of care monitoring.

There are many factors that need to be included in the explanation of predicted mortality statistics, particularly if they are used in comparison to other hospitals. These factors include number of admissions through the emergency room, number of transfers from other hospitals, the age group of the patients used in mortality study and the reasons for death after hospital discharge.

The Graduate Hospital is a 320 bed acute care facility that treats over 10,000 patients each year. Twenty-eight percent of all of our admissions come through the emergency room, and an additional twelve percent are received as transfers from other hospitals. These percentages reflect the high level of

2. Stroke

Of the 17 patients involved, 1 death (5.9%) occurred outside of the acute hospital setting. 7 patients (41.2%) expired within 48-hours of admission. The age breakdown for these patients were as follows:

≤65 years - 0
65-69 years - 0
70-79 years - 7
80-89 years - 3
+90 years - 7

3. Gastrointestinal Catastrophe

Of the 7 patients involved, 1 death (14.3%) occurred outside of the acute hospital setting. 2 patients (28.6%) expired within 48-hours of admission. The age breakdown for these patients were as follows:

≤65 years - 0
65-69 years - 3
70-79 years - 0
80-89 years - 3
+90 years - 1

4. Gastrointestinal Disease

(Note: One patient was inaccurately assigned to this category)

Of the 7 patients involved, 1 patient (14.3%) expired outside of the acute hospital setting. The age breakdown for these patients were as follows:

≤65 years - 0
65-69 years - 0
70-79 years - 1
80-89 years - 4
+90 years - 2

5. Genitourinary

(Note: One patient was inaccurately omitted from this category)

Of the 6 patients involved, 2 patients (33.3%) expired outside of the acute hospital setting. The age breakdown for these patients were as follows:

≤65 years - 0
65-69 years - 0
70-79 years - 3
80-89 years - 3
+90 years - 0

6. Low Risk Heart Disease

Of the 3 patients involved, 1 patient (33.3%) expired outside of the acute hospital setting. The age breakdown of these patients was as follows:

≤65 years	0
65-69 years	0
70-79 years	2
80-89 years	1
+90 years	0

7. Severe Chronic Heart Disease

Of the 25 patients involved, 4 patients (16%) expired outside of the acute hospital setting. 5 patients expired within 48-hours of admission. The age breakdown of these patients was as follows:

≤65 years	0
65-69 years	3
70-79 years	11
80-89 years	8
+90 years	3

8. Severe Acute Heart Disease

(Note: Two patients were inaccurately assigned to this category)

Of the 27 patients in this category, 18 expired within 48-hours of admission. The age breakdown of these patients was as follows:

≤65 years	1
65-69 years	4
70-79 years	12
80-89 years	10
+90 years	2

9. Metabolic Electrolyte Disorders

Of the 14 patients in this category, 8 patients (57.1%) expired outside of the acute hospital setting. The age breakdown of these patients were as follows:

≤65 years	0
65-69 years	3
70-79 years	1
80-89 years	8
+90 years	2

10. Orthopedics

Of the two patients in this category, one (50%) expired outside of the acute hospital setting. The age breakdown of these patients were as follows:

≤65 years	0
65-69 years	0
70-79 years	1
80-89 years	1
+90 years	0

11. Pulmonary Disease

Of the 23 patients in this category, 6 patients (26%) expired outside of the acute hospital setting. 3 patients (13%) expired within 48-hours of admission. The age breakdown of these patients were as follows:

≤65 years	1
65-69 years	4
70-79 years	12
80-89 years	2
+90 years	4

12. Renal Disease

Of the 13 patients in this category, 2 patients (15.4%) expired outside of the acute hospital setting. The age breakdown of these patients were as follows:

≤65 years	0
65-69 years	1
70-79 years	0
80-89 years	1
+90 years	0

13. Sepsis

(Note: One patient was inaccurately omitted from this category)

Of the 14 patients in this category, 2 patients (14.2%) expired outside of the acute hospital setting. 5 patients (38.5%) expired within 48-hours of admission. The age breakdown of these patients were as follows:

≤65 years	1
65-69 years	1
70-79 years	6
80-89 years	3
+90 years	3

14. Severe Trauma

Of the 5 patients in this category, 1 patient (20%) expired outside of the acute hospital setting. The age breakdown of these patients were as follows:

≤65 years -	0
65-69 years -	0
70-79 years -	0
80-89 years -	2
+90 years -	3

15. All Other Conditions

Of the 28 patients in this category, 6 patients (21.4%) expired outside of the acute hospital setting. 5 patients (17.9%) expired within 48-hours of admission. The age breakdown of these patients were as follows:

≤65 years -	1
65-69 years -	3
70-79 years -	15
80-89 years -	7
+90 years -	2

In summary, Grand View Hospital, through its very active hospice, comprehensive community cancer program, and skilled nursing facility programs, cares for a relatively high percentage of patients who have conditions which are considered as being "terminal" in nature.

Additionally, attention should be drawn to the fact that 41% of the deaths reviewed occurred in patients who were between 87 and 100 years of age.

Sincerely,

Stuart H. Fine
Executive Vice President

SHF:bh

GREENE COUNTY MEMORIAL HOSPITAL
WAYNESBURG, PENNSYLVANIA 15370
412—627-3101

October 19, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, MD 21207

Dear Sir:

We, at Greene County Memorial Hospital, are committed to quality and appropriateness of care. We strive to monitor and ensure compliance with quality assurance standards for all patients who seek medical attention.

In view of the limited time available to verify, review and analyze the HCFA Mortality Rates, we have chosen to comment upon the data as it was presented to our facility.

The diagnosis categories selected do not represent all deaths. These categories are not illustrative of deaths in other diagnosis related groups, nor do they allow for complicating or comorbid conditions that existed at the time of death.

HCFA has chosen to identify deaths within thirty days of admission to the hospital rather than those occurring during the inpatient stay. This attributes to hospitals deaths that may be entirely unrelated to the patient's condition and treatment, and deaths that occurred during home or post-acute care management. The circumstances of these deaths are difficult to validate. In addition, time constraints once again did not permit complete verification of those deaths and the diagnostic categories involved. Deaths are being attributed to hospitals, when in fact, they actually occurred after discharge. The documented cause of death may be unrelated to the prior admission.

A hospital-specific expected mortality rate was established for each hospital. The question of "confidence in the interval" (is the statistical model reliable and valid?) is implied for two reasons: 1) not all factors influencing death were considered, and 2) the chance of death is a prediction, and results or deviations will vary depending on the case-mix of the facility, differences in patient status and severity and conditions that arose during treatment. A "predicted" mortality rate is one which will fluctuate and be unstable year after year.

Hospitals may have an above average mortality rate for several reasons. First of all, some numbers look high because the hospital does not have a large number of cases in that diagnostic category. Smaller hospitals, in particular, simply do not have a large enough base for comparison. Secondly, higher percentages may be a result of transfers to referral facilities or specialty centers such as Burn Units, Trauma Centers and Cancer Units. Local community

hospitals may have attributable deaths because terminally ill patients are either at home or at a personal care facility in the community and are admitted when close to death. Thirdly, complicating or comorbid conditions were not considered in preparing the analysis of death data.

In summation, these mortality rates do not reflect the measures of hospital performance, nor do they represent the quality of care that is provided by these facilities.

Very truly yours,

Michael Flinn

Michael Flinn
Administration

MF/jct

cc: American Hospital Association
Judith Adler-McNutt, Director, Medical Records, GCMH
George L. Muir, Assistant Administrator/Fiscal Services, GCMH

Greenville
Regional Hospital

110 North Main Street
Greenville, Pennsylvania 16125-1795
(412) 588-2100

J. William Eddy
President

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

RE: Greenville Regional Hospital
Medicare Provider #390178

Gentlemen:

Thank you for the opportunity to comment on the hospital mortality statistics that will be released by HCFA later this year. We would like to offer the following comments with respect to the data and statistical analysis for Greenville Regional Hospital.

DATA VERIFICATION

The data used by HCFA indicated that a total of 181 Medicare patients admitted to Greenville Regional Hospital died within 30 days of admission during 1986. Of these, 142 died while still patients of the hospital, while 39 died after discharge.

Our own records indicate that 167 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Greenville Regional Hospital is correct.

It is impossible to determine the percentage of the 39 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is also impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Greenville Regional Hospital 110 North Main Street Greenville, Pennsylvania 16125-1795

INTERPRETIVE ANALYSIS

In all of the diagnostic categories, the hospital's actual mortality rate fell within the ranges of the predicted mortality rate. In fact, th' actual reported mortality rates were at or near the lowest expecte. mortality levels for 10 of the 17 diagnostic categories, with t.ree of the categories showing a 0% mortality rate. We noted that Orthopedic disorders was one of the categories with a 0% mortality rate despite the fact that 610, or 27.2%, of the cases reviewed in the study, were orthopedic disorders cases.

In two of the diagnostic categories, Renal Disease and Sepsis, the hospital showed a 33% mortality rate. Although these values were well within the predicted ranges, it is important to note that the number of cases were especially low with only 9 and 6 patients respectively.

Although, all of our actual mortality rates are within expected ranges, we would like to add the following general comments about the results of this statistical analysis:

(1) The use of these statistics, as a measure of quality of hospital care, has never been validated. No one at this time can or should draw conclusions about quality of care based on these statistics alone.

(2) The statistical analysis is not capable of definitively attributing the deaths to the care these patients received in the hospital and should not be represented to the public as such a measure. For example, the model used in this analysis does not take into consideration the severity of illnesses treated at this hospital.

While we support the need for information that can be made available for the public to evaluate the quality of care rendered by health care providers, we continue to feel that more accurate and understandable models need to be developed as soon as possible to assure that the data released is a valid and reliable tool for evaluating the quality of care. Thank you again for this opportunity to comment.

Sincerely,

J. William Eddy

JWE:cje

Hahnemann University

Broad & Vine
Philadelphia, PA
19102-1192

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services

Provider #390051

Dear Dr. Roper:

Hahnemann University Hospital is a 616 bed acute care facility located in center city Philadelphia. We are a major referral center for many specialities, most notably, cardiology, oncology and trauma. We treat many patients with significant medical and surgical illnesses as evidenced by our case mix index, which is the second highest in the State of Pennsylvania. This index is a general measure indicative of the severity of illness of medicare patients.

As a hospital accredited by the Joint Commission on Accreditation of Healthcare Organizations, the quality of care provided to our patients is of the utmost concern to our governing body, management and medical staff. We have in place an ongoing program which monitors and evaluates all aspects of patient care. The cornerstone of our program is the peer review activities performed by our medical staff. Mortality review is an important aspect of our program and one of the many methodologies utilized to focus peer review activities, all of which are geared towards the identification of opportunities to improve care.

However, mortality data, by itself, does not measure quality. A mortality rate higher than predicted does not confirm the existence of quality problems, just as a mortality rate lower than predicted does not establish that a hospital provides high quality care. The model used by HCFA has not been tested and validated sufficiently to be a proven predictor of patient mortality. This model assumes that all patients are "average" and several important factors such as , severity of illness, socio-economic status, or the presence of a terminal illness, were not considered.

Although Hahnemann University Hospital was within the predicted mortality ranges in all of the published categories, this data is only able to provide very simplistic statistical comparisons. The quality of care can only be determined through extensive study performed by qualified practitioners. Through our on-going monitoring activities, acquisition of state of the art equipment, and continual upgrading and expansion of our facility, we strive everyday, to provide the best care possible to each of our patients.

We would like to thank HCFA for the opportunity to comment on the release of Medicare Mortality data for 1986.

Sincerely,

Howard J. Goldstein
Vice President for Health Affairs
and Executive Hospital Director

Arnold T. Berman, M.D.
Medical Director

Hamot

Hamot Medical Center
201 State Street
Erie, PA 16550-0001
814/870-6000

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Medicare Provider #390063

Dear Dr. Roper:

We were pleased to have the opportunity to review the Medicare data prior to its publication. As a teaching hospital and regional referral center providing tertiary care to a thirteen county area in the tri-state region, Hamot Medical Center provides highly sophisticated services for critically ill patients. Therefore, we would anticipate that both our range of predicted mortality rates and our actual mortality rates would be higher than the average community hospital.

We appreciate the Department's recognition of the complexity of the quality issue and your statement "we can not and do not recommend use of the information by itself to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals." While Hamot strongly supports increased consumer and payor involvement, as evidenced by our leadership position in the Buy-Right Demonstration project in Pennsylvania, we also recognize the difficulty inherent in the interpretation of complex data such as mortality rates by non-professionals and the damage which can be caused by erosion of the public's confidence in health care providers.

We trust that you will continue to pursue appropriate forums for discussion and analysis of these critical issues.

Sincerely,

Dana R. Lundquist
President

C: Administration
Board of Directors
Medical Staff Executive Committee

Hanover
GENERAL HOSPITAL

October 20, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Medicare Provider #390233

Dear Mr. Roper:

Please accept the following as constructive criticism of the planned release of selected mortality information about short term acute care hospitals. The comments are general, since we found no significant inaccuracies in the data provided to us.

1. The use of the principal diagnosis as the basic data source can be misleading because of itself it may not reflect the true severity of illness. This is particularly true in the low risk categories. We feel that this is a shortcoming of the coding procedures we must use.

2. Cause of death outside the facility (within 30 days of discharge) may not relate to the patient's reasons for hospital admission, as was the case with one of our discharged patients who took his own life. It would have been helpful if HCFA had provided data on cause of death.

3. Ranges of predicted mortalities in some diagnostic categories were so wide as to be meaningless for comparative purposes, due to small sample sizes.

We are interested in valid comparative data and believe that it would be helpful in evaluating our quality of care. We are concerned that the data in question are not truly indicative of quality of care provided by our or any other facility.

Sincerely,

Philip W. Pennington
President

PWP/pk

cc: Lyn Becker, Q. A. Coordinator
Kelly M. Grotzinger, HAP

300 HIGHLAND AVENUE ☐ HANOVER, PA ☐ 17331-2297 ☐ PHONE (717) 637-3711

HARRISBURG HOSPITAL
A CAPITAL HEALTH SYSTEM HOSPITAL
SOUTH FRONT STREET
HARRISBURG, PENNSYLVANIA 17101-2099

COMMENTS ON THE HCFA 1986 MORTALITY DATA
Provider 390098

The data used by HCFA indicates that a total of 403 Medicare patients admitted to Harrisburg Hospital died within 30 days of admission. After verification, 401 Medicare patients died within 30 days of admission. Of these, 326 died while still a patient in the hospital and 75 died after discharge. (36 patients died in a skilled nursing facility and 39 died at home) Our records indicate that 5450 Medicare discharges occurred during calendar year 1986. Presumably the discrepancy of HCFA's 3395 cases reflects multiple admissions of individual beneficiaries to Harrisburg Hospital.

Enclosed is a corrected copy of the patient listing clearly identifying two patients mistakenly coded as being patients in Harrisburg Hospital and six deaths occurring within the hospital not after discharge.

In one of the diagnostic categories, namely Renal Disease, the hospital's actual mortality rate fell outside of the range of the predicted mortality rate (54). Verification of these 14 renal deaths, indicates that one patient died at home, 13 died in Harrisburg Hospital. Harrisburg Hospital operates a chronic renal dialysis program and of the 14 cases, 5 were in this program. These patients were ranged in age from 74-93. Using the Medisgroups Severity of Illness System, the average weighted admission severity of the renal cases was 3.3, indicating high potential for organ failure.

VHA

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

ANALYSIS OF HCFA MORTALITY DATA
HARRISBURG HOSPITAL - 390098

Diagnostic Category	Deaths Reported by HCFA In-hospital	Deaths Reported by HCFA Post-hospital	Deaths Verified by Hospital In-hospital	Deaths Verified by Hospital Post-hospital	
CA -- Cancer	47	16	47	16	
CE -- Cerebrovascular Accidents	20	4	21	3	**
GC -- Gastrointestinal Catastrophes	16	-	15	-	*
GI -- Gastrointestinal Disease	9	4	9	4	
GU -- Urologic Disease	11	8	11	8	
GY -- Gynecologic Disease	-	-	-	-	
HL -- Low Risk Heart Disease	24	1	23	1	*
HM -- Severe Chronic Heart Disease	29	7	29	7	
HS -- Severe Acute Heart Disease	44	4	46	2	**
ME -- Metabolic/Electrolyte Disturbances	10	4	10	4	
OP -- Orthopedic Disorders	1	2	1	2	
PN -- Pulmonary Disease	31	15	32	14	**
RN -- Renal Disease	13	1	13	1	
SE -- Sepsis	11	3	11	3	
TR -- Severe Trauma	5	1	5	1	
EY -- Ophthalmalogic Disease	-	-	-	-	
UN -- Other Diagnoses	51	11	53	9	**
Total -- All Categories	322	81	326	75	

* Inaccurate Admission Reported

[redacted] Age 76
Age 73

** Incorrect Date of Death Reported

[redacted] Age 86
Age 64
Age 67
Age 81
Age 83
Age 73

PA 96.1

HAVERFORD COMMUNITY HOSPITAL
2000 Old West Chester Pike
Havertown, Pa. 19083
645-3600
A NONPROFIT, VOLUNTARY HEALTH CARE CENTER

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

I am writing on behalf of Haverford Community Hospital, and I would like to comment on our HCFA mortality statistics for calendar year 1986. Prior to our comments, however, I would like to emphasize that the name of our hospital is Haverford Community Hospital, not Haverford General Hospital as indicated on the heading of your report.

Since receiving our mortality data in late September, we have spent many hours reviewing our figures with representatives of the Medical Staff as well as with the appropriate committees within our hospital. The enclosed report presents a summary of our findings and comments to be included with our statistics when they are published.

Should you, or any member of your staff, require additional information or need clarification of any points we have raised, please do not hesitate to contact me.

Thank you.

Sincerely,

John J. Buckley
Administrator

JJB/ph
Enclosure

c.c.: Myron Resnick, M.D., Co-Chief of Medicine
Julian Gladstone, M.D., Co-Chief of Medicine
Thomas Matulewski, M.D., Chief of Surgery
Charles Daly, Delaware Valley Hospital Council

HAVERFORD COMMUNITY HOSPITAL'S
RESPONSE TO RELEASE OF MORTALITY STATISTICS
CALENDAR YEAR 1986

Haverford Community Hospital has thoroughly reviewed the mortality statistics which were derived by the Health Care Financing Administration (HCFA). This review was part of the Hospial's continuing effort to provide the highest quality medical services offered by a primary care community hospital.

All of the actual mortality rates fell within the predicted ranges for Haverford Community Hospital. Nevertheless, we felt it was important to perform a detailed analysis of the data to ascertain that the level of care was the best that could be provided, given the Hospital's patient population.

This analysis resulted in the identification of several significant trends:

1. Many of the patients noted in the HCFA figures expired within 48 hours of admission to the Hospital. Further exploration of the medical records of these short-term patients showed that they came to the Hospital in very unstable conditions; many were already brain dead prior to entering the hospital.

2. Haverford Community Hospital provides services to several large nearby nursing homes. A large proportion of the patients who expired in our facility were transferred from these local nursing homes after their condition had deteriorated. Many of these patients were admitted with end-stage diseases and had multiple co-morbidities resulting in a bleak prognosis.

3. Many of the families of the patients identified in the report had requested that no cardio pulmonary resuscitation (CPR) or other dramatic life-saving measures be performed due to the patient's condition, advanced years and/or poor quality of life.

4. The patients identified in Haverford Community Hospital's mortality report averaged 78.1 years of age at the time of death.

After studying the results of HCFA's mortality survey and performing our self-analysis, we have integrated the findings into the Hospital's Quality Assurance activities. We are satisfied at this point that in 1986 Haverford Community Hospital provided the best possible patient care. Haverford Community Hospital will continue to monitor all factors which indicate quality performance for the patients we serve.

HAZLETON GENERAL HOSPITAL

700 EAST BROAD STREET, HAZLETON, PA. 18201 • 717 454-2441

October 27, 1987

William Roper, M.D.; Administrator
Dept. of Health & Human Services
H.C.F.A. - Box 26684
Health Standards Quality Review
Baltimore, Maryland, 21207

RE: Hospital Mortality Data

Dear Dr. Roper,

Hazleton General Hospital's Verification of H.C.F.A. Data

1. Total number of patients expiring within thirty (30) days of admission were, in fact, patients at Hazleton General Hospital as per dates listed. Summary follows:

	VERIFIED INHOUSE DEATHS	REPORTED POST-HOSPITAL DEATHS
1. Cancer	22	1
2. Cerebrovascular Accidents	18	6
3. Gastrointestinal Catastrophes	9	1
4. Gastrointestinal Disease	10	1**
5. Urologic Disease	1	-
6. Gynecologic Disease	0	0
7. Low Risk Heart Disease	4	1
8. Severe Chronic Heart Disease	15	5
9. Severe Acute Heart Disease	29	-
10. Metabolic/Electrolyte Disturbances	1	-
11. Orthopedic Disorders	2	1
12. Pulmonary Disease	22	2
13. Renal Disease	3	1
14. Sepsis	6	-
15. Severe Trauma	1	-
16. Opthalmalogic Disease	0	0
17. Other Diagnoses	20	5
TOTAL - All Categories	163 (87%)	24 (13%)

** Patient [redacted] is the only post-hospital error identified. Death occurred in Lehigh Valley Medical Center, Allentown, Pennsylvania on January 16, 1987. (a tertiary care hospital)

HAZLETON GENERAL HOSPITAL

700 EAST BROAD STREET, HAZLETON, PA. 18201 • 717 454-2441

AREAS NOT VERIFIED:

1. Twenty-three (23) of the Twenty-four (24) post-discharge deaths cannot be verified - as this data is currently not available or shared with acute care hospitals.
2. Hazleton General Hospital does not currently possess the sophisticated systems necessary to verify only the last admission of Medicare beneficiaries during the 1986 year. According to statistical data the actual number of total Medicare admissions, including multiple admissions to Hazleton General Hospital, was 2,440.

GENERAL COMMENTS:

1. Hazleton General Hospital's actual mortality rate for all of the listed categories falls within the range of predicted mortality established by H.C.F.A.; however, the sixteen (16) selected diagnostic catagories - including both the high and low-risk groups can be and/or appear to be misleading, as they do not reflect the complicating factors and conditions which, in reality, may be the cause of death.

   (I.E.) -- In the review of Hazleton General Hospital's orthopedic deaths (low-risk group) it was identified that two (2) of the three (3) deaths occurred in patients with pathological fractures, both of which were patients with terminal cancer.

2. Twenty-two percent (22%) of the total deaths occurred in patients who were admitted to Hazleton General Hospital from the area's skilled nursing facilities. (average patient age was 74.8 years)

3. Fifty-four percent (54%) of the deaths reported post-discharge occurred in patients that were discharged to either skilled nursing facilities, Inpatient Hospice Units, or as in one (1) case, a tertiary health center.

We hope that these comments will be helpful in H.C.F.A.'s data release scheduled for December, 1987.

E. Richard Moore, C.E.O.
Hazleton General Hospital

HAZLETON-SAINT JOSEPH MEDICAL CENTER
NORTH CHURCH AND NINTH STREETS
HAZLETON, PENNSYLVANIA 18201

October 24, 1987

Mr. Harvey Brook
Health Standards and Quality Bureau
6300 Security Blvd.
Meadows East Bldg.
Rm. 2 D 2
Baltimore, Maryland 21207

Dear Mr. Brook:

In reference to the Health Care Financing Administration's Mortality Statistics and our hospital's mortality listings - our hospital medicare provider number being 390054, we would like to comment on the report for our hospital.

In reference to the listing of the 155 cases reported by HCFA for our hospital, 16 of the patients expired outside of the hospital. Two of the date of deaths reported by HCFA were incorrect [redacted] should be date of death 1-25-86 and [redacted] should be date of death 4-29-86.

Five of deaths that occurred outside of the hospital could not be confirmed by physicians.

In reference to the coding of the principal diagnoses by HCFA we are in compliance except in two cases as listed below:

HIC#	DATE DEATH	HCFA PRINC.DIAGNOSIS	HOSP. PRIN.DIAG.
[redacted]	1-17-86	2765	1977
[redacted]	1-20-86	486	428

On mortality case was changed by the Pa. KePRO after their review of the medical record:

HIC#	DATE DEATH	HCFA PRINC.DIAGNOSIS	KEPRO PRIN.DIAG.
[redacted]	12-28-86	0539	15330

Sincerely,

Gerald Andriole, M.D.
Medical Director

Frick Community Health Center

SOUTH CHURCH STREET / MOUNT PLEASANT, PA 15666 / PHONE 412-547-1500

Joseph A. O'Leary,
Executive Director

October 23, 1987

William L. Roper, M.D., Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Hospital: 390217
RE: Comments on the HCFA Mortality Data

The following are the Comments of the Frick Community Health Center on the 1986 HCFA Mortality Data Release:

Data Verification

- The data used by HCFA indicate that in 1986 a total of 1,664 Medicare patients were admitted to the Frick Community Health Center and 147 expired still a patient in the hospital, while 24 expired after discharge but within 30 days of the hospital admission.

- Our hospital records indicate that 2,837 Medicare Admissions occurred in 1986. It is presumed the discrepancy reflects multiple admissions of individual beneficiaries within the calendar year and the 35% not included in the sample. Therefore, we have no way of verifying whether the number of Medicare patients treated at Frick Community Health Center is correct on the HCFA report.

- The Frick Community Health Center records indicate that 150 patients in the HCFA Mortality List expired while still inpatients and only 21 expired after discharge but within 30 days of admission.

Errors Identified

Patient ID - [redacted] - Date of Discharge 02/01/86. Date of Death 02/10/86. Medical Record review indicates the date of death to be the discharge date 02/01/86. Medical Record Coding reviewed and found to be correct regarding date and discharge status. It cannot be determined where the 02/10/86 death date originated in the HCFA data.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Patient ID [redacted] - Date of Discharge 09/15/86. Date of Death 09/30/86. Medical Record error found in incorrectly coding as a routine discharge on 09/15/86. Data will be corrected. Again it cannot be determined where the 09/30/86 death date originated in the HCFA data.

[redacted] - Date of Discharge 04/24/86. Date of Death 04/25/86. Medical Record review indicates the date of death to be the discharge date 04/24/86. Medical Recording Coding reviewed and found to be correct. Again it cannot be determined where the 04/25/86 death date originated in the HCFA data.

It is impossible to determine the accuracy of the remaining 21 patients listed as dying after discharge on the HCFA mortality report because deaths after discharge are not included in the patient's medical record.

Please see the attached analysis of reporting errors.

Interpretative Remarks

The Frick Community Health Center appreciates HCFA's efforts to measure quality. However, we emphasize that the HCFA mortality data does not measure quality. Mortality data in itself can be misinterpreted, cause confusion, and apprehension among beneficiaries and the general public. The HCFA model is deficient because:

- The ability of the model to detect differences in quality has never been validated.
- For the most part the model assumes each hospital's patients are "average".
- Does not measure severity (how ill the patient was at the time of admission).
- Is not all inclusive - only pertains to Medicare Patients expiring within 30 days of the last admission in 1986.

The Frick Community Health Center has a strong commitment to providing quality care to all patients. However, quality can only be evaluated through the peer review process. Mortality data is only a tool to use as a guide or possible areas to focus peer review. Frick Community Health Center will utilize the data in this manner.

The Joint Commission on Accreditation of Healthcare Organizations, American Hospital Association and other organizations are investigating methods of evaluating hospital quality that rely on measures other than mortality rates and the Frick Community Health Center anxiously awaits this methodology to incorporate it into its existing quality assurance efforts.

Sincerely,

Joseph O'Leary
Executive Director

JAO/et
Enclosures: Attachments #1 [redacted]

ATTACHMENT # 1

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	23	2	23	2
CE -- Cerebrovascular Accidents	8	3	9	2
GC -- Gastrointestinal Catastrophes	8	2	8	2
GI -- Gastrointestinal Disease	11	1	11	1
GU -- Urologic Disease	4	–	4	–
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	3	3	3	3
HM -- Severe Chronic Heart Disease	25	3	26	2
HS -- Severe Acute Heart Disease	19	1	19	1
ME -- Metabolic/Electrolyte Disturbances	1	1	1	1
OP -- Orthopedic Disorders	0	1	0	1
PN -- Pulmonary Disease	16	3	16	3
RN -- Renal Disease	2	0	2	0
SE -- Sepsis	8	0	8	0
TR -- Severe Trauma	6	0	6	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	13	4	14	3
Total -- All Categories	147	24	150	21

PA 100.2

Holy Redeemer Hospital
and Medical Center
SISTERS of THE HOLY REDEEMER

October 28, 1987

John F. Dunleavy, FACHE
President

Mr. Harvey Brook
Health Standards and Quality Bureau
6300 Security Boulevard
Meadows East Building
Room 2D2
Baltimore, Maryland 21207

Dear Mr. Brook:

In anticipation of the HCFA's plan to publish hospital specific mortality data, we have, as requested, made an attempt to validate the data forwarded to us on September 21, 1987.

Your report included a total of 284 deaths for Holy Redeemer Hospital. 63 of the deaths recorded are reportedly deaths that occurred within 30 days of patient discharge. These are difficult to validate. We did attempt to contact those attending physicians who were caring for the patient prior to discharge, however, some of these physicians were not able to get back to us in sufficient time to meet your deadline for response. Some of the attending physicians were not certain of the patient's status within the 30 days post discharge because they were not the patient's family physician. Of the 49 which we were able to validate, we found three data discrepancies. These are as follows:

ID#	NAME	(DOA)	DOD(DISC)	DOD(DEATH)
[redacted]	[redacted]	6/6/86	6/7/86	6/8/86

The actual date of discharge for this patient was 6/8/86.

[redacted]	[redacted]	4/16/86	5/13/86	5/14/86

The actual date of death for this patient was 5/13/86.

[redacted]	[redacted]	8/13/86	9/2/86	9/1/86

The actual date of death for this patient was 9/2/86.

The remaining 221 cases of deaths occuring in our hospital have been validated and no other discrepancies are found.

In final comment, I would simply like to state that quality of care cannot be evaluated by mortality statistics. Since HCFA has stated

that its objectives in releasing the data are to analyze hospital variations, focus activities of PROs and feed back data to the public, I feel the release certainly possesses the potential for serious public misinterpretations of hospital performance.

Respectfully,

John F. Dunleavy, FACHE
President

JFD/mdp

HOLY SPIRIT HOSPITAL

PLANNING AND COMMUNITY AFFAIRS

October 19, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Washington, D.C. 20201

Dear Doctor Roper:

RE: Holy Spirit Hospital
#390004
Mortality Data

We have reviewed the mortality data recently provided by HCFA and find no serious conflicts with data maintained by this hospital.

There was one instance of two different patient names associated with the same HIC number, same age, sex, dates, etc.

We experienced extreme difficulty doing any comparison checking, since the six-letter surname, and use of the HIC number rather than medical record number, does not trigger reports in our computer system. Consideration of these issues would be very valuable in any future data publishing.

We did note that 61 patients on this list died after discharge, and we have no knowledge of the cause of death. Additionally, we noted that 10 patients died within 3 days of discharge. There was no pattern to these deaths, as they involved six different diagnostic categories and multiple discharge destinations.

Finally, we note that our routine evaluation of mortality rates shows that most patient deaths in all diagnostic categories involved patients with multiple complicating conditions.

Sincerely,

George E. Ferrey Jr.

George E. Ferrey, Jr.
Director of Planning and
Community Affairs

GEF:hbp

NORTH 21st STREET CAMP HILL, PENNSYLVANIA 17011 PHONE 763-2100

Philadelphia Geriatric Center

My rainbow...token of the covenant between Me and you...for perpetual generations

5301 Old York Road • Philadelphia, Pennsylvania 19141 • (215) 456-2900

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October 27, 1987

Mr. Harvey Brooks
HCFA Health Standards and Quality Bureau
Meadows East Building - Room 2D2
6325 Security Boulevard
Baltimore, MD 21207

Dear Mr. Brooks:

Enclosed please find Philadelphia Geriatric Center's analysis of the HCFA mortality information. We would like to submit these comments for publication as part of your December mortality analysis publication. For purposes of identification, our Medicare Provider Number is 390247.

Thank you for your cooperation.

Sincerely,

Michael Pietrowicz
Administrator, Hospital Services

MP/lmp
encl.

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HOME FOR THE JEWISH AGED: HARRY A. AND SADIE ROBINSON BUILDING, HARRY AND REBA LEVIN BUILDING • YORK HOUSE APARTMENTS • ABRAM H. AND HELEN WEISS INSTITUTE: FRIEDMAN HOSPITAL, SLEY NURSING PAVILION, BAER CONSULTATION AND DIAGNOSTIC CENTER • GERONTOLOGICAL RESEARCH INSTITUTE • COMMUNITY HOUSING IN HOME SERVICES PROGRAM • HELEN L. WEISS REHABILITATION DAY CENTER • HOME HEALTH CARE SERVICES • GERIATRIC MEDICAL SPECIALISTS

FEDERATION OF JEWISH AGENCIES OF GREATER PHILADELPHIA • UNITED WAY CONSTITUENT

Philadelphia Geriatric Center

ANALYSIS OF HCFA MORTALITY INFORMATION

The Hospital of the Home for the Jewish Aged is a leader in the provision of acute and rehabilitation care to the geriatric population. We are commited to the delivery of quality patient care to the frail, elderly community. The average age of our patient base is eighty-four (84) years; ninety-nine percent (99%) of our patients are Medicare beneficiaries.

Comparative analysis of mortality rates between general acute care hospitals and the Hospital of the Home for Jewish Aged is incompatible due to our frail, elderly patient base. HCFA's mortality rate analysis for the Hospital of the Home for the Jewish Aged reported the death of ninety (90) patients out of a selected 512 admissions in 1986. This mortality rate of 17.6% assigned by HCFA is highly inflated and misleading. For 1986, the Hospital of the Home for Jewish Aged's actual mortality rate for all admissions was 11.3% (105 deaths for 930 admissions). This mortality rate accounts for all admissions in 1986 who died within thirty (30) days of admission.

The information provided below summarizes the characteristics and patient composition of the ninety (90) deaths identified by HCFA. Analysis of these patients concludes the following:

1. Average Age - The average age of the ninety (90) patients was ninety-two (92) years.

2. Source of Admissions - Seventy-one (71) patients (77%) were admitted from nursing homes. Nursing home admissions have a higher degree of severity than community patients.

3. Comorbidity - All ninety (90) patients exhibited comordibities; all patients exhibited multiple medical problems.

4. Do Not Resuscitate - Fifty (50) deaths that occurred had a Do Not Resuscitate order (DNR) in place. The families of these patients requested that no heroic actions be taken to sustain the life of the patient. Recalculation of HCFA's mortality rate, adjusting for the fifty (50) DNR orders, results in a 7.8% rate for the 512 cases.

The Hospital of the Home for the Jewish Aged is proud of the services and care delivered to our patients. HCFA's interpretation of our mortality rate is incomplete; their conclusions are misleading. A complete review of our statistics for 1986 illustrate an 11.3% mortality rate for all admissions; a 4.3% mortality rate excluding patients with written Do Not Resuscitate orders. These rates are truly exceptional given the characteristics of our patient base. The Hospital for the Home for the Jewish Aged is a nationally recognized leader in the provision of high qaulity care to the geriatric community.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA

3400 Spruce Street/G1 Philadelphia, PA 19104 (215)662-4000

PROVIDER # 390111

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Resources
Washington, D.C. 20201

Dear Dr. Roper:

We are responding to your letter of September 21, 1987 regarding your agency's plans to publish certain mortality information for our institution.

On behalf of the Hospital of the University of Pennsylvania, I extend our appreciation to you for giving us the opportunity to review and comment on the statistics to be published. We also would like to congratulate you and your staff on the remarkably quick progress made in developing a mortality prediction methodology which is so obviously better than the one used just a year ago. We do feel, however, that the model continues to have certain important limitations.

Based on our review of the mortality data and our records, we found that the current statistical model is not able yet to produce a true measure of performance. By failing to adjust for the severity of the patients' illnesses and for the mix of a hospital's patients, the model fails to assess the patients' contributions to the outcome. Our analysis demonstrated that the variances between actual and predicted mortality were not the result of a lesser level of care provided but were caused by important and legitimate patient factors, unrelated to the hospital's performance.

HUP

We would therefore recommend that the Health Care Financing Administration primarily use the data to focus review on certain hospitals, cases or diagnostic categories. If disclosure of the mortality information to the public is made, it needs to include clear explanations of its limitations as a measure or indicator of hospital performance. Our comments, both on the accuracy of the data and the statistical model, are enclosed.

The Hospital of the University of Pennsylvania is prepared to work with your agency in developing improved methods to derive performance indicators.

Sincerely,

C. Edward Schwartz
Executive Director

FK/CES:km

Enclosure

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA

REPORTING ERRORS IN HEALTH CARE
FINANCING ADMINISTRATION REPORT OF
1986 MORTALITY STATISTICS

DIAGNOSTIC CATEGORY: SEPSIS

A. UNREPORTED DEATH OF ONE PATIENT
Our records indicate that the following Medicare patient died at our facility and met all the selection criteria:

PT ID #	SURNAME	DIAGNOSTIC CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF D/C	DATE OF DEATH	PRINCIPAL DIAGNOSIS
[redacted]		SE	088	M	9-8-86	9-21-86	9-21-86	03842

PA 105.2

B. ERROR IN DATE OF DEATH
HCFA report lists date of death as follows:

PT ID #	SURNAME	DIAGNOSTIC CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF D/C	DATE OF DEATH	PRINCIPAL DIAGNOSIS
[redacted]		SE	087	M	12-25-86	12-26-86	12-31-86	0389

The medical record lists death of date for above patient as: 12-26-86.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA
COMMENTS ON THE HEALTH CARE FINANCING ADMINISTRATION REPORT
OF 1986 MORTALITY STATISTICS

The Hospital of the University of Pennsylvania welcomes the opportunity to review and comment on the mortality data developed by the Health Care Financing Administration (HCFA) for its Medicare patients. The 1986 Medicare mortality statistics for our institution are very favorable. Our actual mortality for all diagnostic categories combined falls on the lowest end of the predicted mortality range. And, in only one of the sixteen diagnostic categories listed, Sepsis, does our mortality slightly exceed the predicted range.

Our Hospital and medical staff support HCFA's objective to provide the public with information about hospital performance. We also agree with HCFA's aim to provide consumers with valid and accurate information which will permit them to judge the quality of care provided by individual institutions and make informed choices about where to obtain health care services. These important objectives can only be met, however, if the information provided represents true indicators or measures of quality and performance.

The mortality statistics are generated by a statistical model which acknowledges that the outcome of health care reflects not only what the hospital and physicians do in treating the illness but certain patient characteristics. The model currently adjusts for only 5 such characteristics, namely age, gender, previous hospitalizations, transfer from another hospital and the presence of complicating diseases. The model then presumes that the differences between the predicted and actual mortality rates are a function of the treatment and care provided to the patients in the hospital and that, in fact, these differences represent a measure of high or low quality. The model unfortunately fails to account for other patient characteristics which contribute to the outcome and which we believe are critical to the development of meaningful and accurate performance measures. The review of our only exception diagnostic category, Sepsis, clearly illustrates the limitations of this statistical model.

We appointed a panel of physicians, representing several medical specialties, none of whom were involved in the care of patients at issue, to examine our mortality in the diagnostic category of Sepsis and determine whether our "higher" rate represented a problem in the delivery of care. After reviewing the 13 records of patients who died, our panel concluded that there was no evidence that a change in the treatment would have improved the outcome for the patient. The panel found that the patients who died of Sepsis in our Hospital in 1986 were admitted in extremely serious condition, following grave, chronic and complicated illnesses. Without exception, the patients' prognoses on admission were extremely poor; in all cases death was not unexpected. Some specific findings from our review of these 13 records revealed that:

> 12 of the 13 patients (92%) were admitted after presenting at our Emergency Department with symptoms requiring immediate treatment and admission. These patients were indeed gravely ill.

- The category of Sepsis actually includes patients with different, extensive and grave complicating diseases and conditions. A large proportion of our patients in this group, 11 of 13 (85%), recognizing the seriousness of their illnesses, expressed the wish that no extraordinary efforts be made to prolong their lives.

- Despite appropriate therapeutic measures, 7 of the 13 patients (54%) died within 24 to 48 hours of admission to our Hospital, again reflecting the gravity of their illnesses on admission.

- 5 of the 13 patients (38%) had a secondary diagnosis of senile dementia or Alzheimer's disease on admission, which are significant contributors to patient disability and outcome.

Our review leads us to conclude that HCFA's current methodology of producing indicators of a hospital's performance, aimed at measuring the hospital's contribution to the mortality outcome, is incomplete. First, the model fails to measure the fundamental contribution of the patient, namely his health status and the severity of his illness on admission, to the ultimate outcome. Certainly in the Sepsis category the five contributory factors which the predictive model incorporates (age, sex, transfer, associated illness and previous admissions) did not sufficiently adjust for our patient population which, without exception, were extremely ill on admission to our facility and represented patients whose risk of dying on admission was clearly higher than the model allowed. In addition, the model produces the mortality rates for diagnostic categories by combining smaller disease groups. Despite the fact that they are pooled, the component disease groups are not necessarily of equal severity or risk for poor outcome. Thus a hospital's higher than predicted mortality may be due simply to the fact that it treats more of a higher risk diagnosis within the diagnostic category. The HCFA model does not control for this type of situation, which is referred to as case mix.

In conclusion, we wish to re-state our support of HCFA's efforts to develop meaningful performance indicators. We feel, however, that as long as the statistical model fails to consider the severity of illness and the case mix of a particular hospital, the data produced will not measure a hospital's true contribution to the outcome and thus the hospital's performance. It is our suggestion that the data produced through the current model should be used primarily to focus review by hospitals, Peer Review Organizations or HCFA on particular cases or diagnostic categories. If disclosure of the mortality information is made to the public, however, it needs to include clear explanations of its limitations as a measure or indicator of hospital performance.

MCP The Medical College of Pennsylvania

The President

October 26, 1987

Harvey Brook
Health Standards and Quality Bureau
2D2 Meadows East Building
6300 Security Blvd.
Baltimore, MD 21207

Dear Mr. Brook:

Attached you will find comments from the Medical College of Pennsylvania regarding our hospital's mortality data as compiled by HCFA. It is our understanding that these comments will be included with the data when it is published by HCFA in December.

Sincerely,

D. Walter Cohen, D.D.S.

DWC/ll

3300 HENRY AVENUE PHILADELPHIA, PENNSYLVANIA 19129 (215) 842-7000

1850 The Female Medical College of Pennsylvania 1867 The Woman's Medical College of Pennsylvania 1970 The Medical College of Pennsylvania

COMMENTS FROM THE MEDICAL COLLEGE OF PENNSYLVANIA ON HCFA MORTALITY DATA FOR 1986

The Medical College of Pennsylvania (MCP) has reviewed each of the 192 Medicare deaths for the year 1986, as well as January, 1987, to determine if our hospital's mortality rate, as computed by HCFA for Medicare patients, is accurate. Our review, carried out by a team of physicians, indicates that there are only minor variations between our data and those supplied by HCFA. The data show that for overall mortality and for mortality in all 16 high and low risk categories reported, the MCP Hospital is either within or below predicted ranges.

The physician reviewers analyzed 192 patient charts. The information which emerged from this review process affirms that the Medicare patients who died at our hospital in 1986 were a very seriously ill group.

Approximately 22 percent of the patients died within 48 hours of admission. Sixty-three (63) percent were admitted through the Emergency Room. It was the consensus of the reviewing physicians that 97 percent were very high risk. Eighty-four (84) percent had terminal illness on admission to the hospital. Many had been admitted to our hospital for terminal care.

The Medical College of Pennsylvania is a 445-bed medical school hospital offering tertiary care to a

patient mix with a high proportion of people covered by Medicare and Medicaid. Many of our patients are transferred from community hospitals. These factors result in a greater-than-usual number of severely ill patients who receive treatment in our hospital. Herein lies one of the major deficits in the reporting system currently used by HCFA: the failure to take patient severity into account.

We recognize that HCFA has made substantial improvements in its release of information to the public about hospital mortality data. This year's inclusion of comparative data on expected mortality rates represents an advance over last year's release of raw information. Still, HCFA continues to use a system designed primarily for billing in an effort to shed light on quality of care issues. The real danger is that the use of this information by the public will continue to lead to erroneous judgments about the quality of hospital care.

Many agencies have urged HCFA to release mortality data only if accompanied by qualifying statements citing the limits of the report. In our opinion these disclaimers do not go far enough in eliminating misinterpretation of the data by the public. Therefore, we respectfully request that HCFA develop an appropriate model which can accurately reflect the quality of care in the nation's hospitals. We would be happy to work with HCFA on this process.

Osteopathic Medical Center of Philadelphia
4150 City Avenue, Philadelphia, Pennsylvania 19131-1696

(215) 581-6000

Hospital of Philadelphia College of Osteopathic Medicine

Osteopathic

October 20, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

We appreciate the opportunity to comment on the mortality data which your office has supplied on our Medicare patients. We were pleased to note that Hospital of Philadelphia College of Osteopathic Medicine statistics fall within range in all categories. We feel that this is a reflection of the high quality of care our patients receive.

Although we understand and support HCFA's intent in publishing this information, flaws in the methodology and inaccuracies in the data do exist.

In the HCFA data which we verified, representing only those Medicare patients who died in our hospital, there were errors in the dates of deaths as well as errors in the patient's discharge status. One patient is currently alive while another patient similarly labeled was discharged routinely. When the patient's date of death is later than our discharge date, HCFA does not provide information showing the source of that data.

It is critical that this data be accurate, because it can pose difficulty to a Medicare beneficiary who may still require medical care.

In the presentation of the information, certain categories are deceptive because the reader may assume that the patient died of a long-standing condition within that category. These categories use "principal diagnosis" to define them. This definition, the basic reason for admission after study, may not be the patients' primary diagnosis. It may not include the complications of a patient's weakened physical condition due to other causes, such as heart disease, chronic renal failure, etc.

Dr. Roper

The methodology of the model used by HCFA omitted a number of other factors which are important. The patients' severity of illness is not an element of HCFA's measurement, nor is source of admission and patient population. For example, patients who may be admitted through the Emergency Room often have a combination of severe diseases, and thus are at a much higher risk. Nutritional and compliance levels of urban patients are generally not as adequate as patients in suburban areas, thereby necessitating additional consideration.

Once again, thank you for the chance to review the Medicare mortality information pertinent to the Hospital of Philadelphia College of Osteopathic Medicine.

Sincerely,

Herbert B. Boulden
Acting Executive Director

INDIANA HOSPITAL

A Subsidiary Of
Indiana Healthcare Corporation

Hospital Road, P.O. Box 788
Indiana, Pennsylvania 15701
(412) 357-7000

October 21, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

This letter is submitted in response to HCFA's intent to release mortality statistics on hospitals participating in the Medicare program. The following paragraph begins the comments we expect to have appended to the mortality statistics for Indiana Hospital, Medicare Provider #390173.

Our Administrative Staff has reviewed all data released by the Department of Health and Human Services (HHS) and we have the following general comments:

- Because the relationship of the statistics to quality of care is unknown, interpretation of this data to suggest a measure of hospital performance would be tenuous at best.

- Placing mortality statistics into such broad high risk and low risk categories without the use of severity indicators may significantly reduce the validity of the data.

- The inclusion of Medicare beneficiaries who die within 30 days after admission to the hospital can distort the mortality data by adding to the statistics those who may have died from causes unrelated to the principle diagnosis.

The data was reviewed with the above limitations in mind. In all instances, Indiana Hospital's mortality rate was well within the acceptable ranges released by HHS and does not indicate a significant variance in any of the areas studied.

Sincerely,

Donald D. Sandoval, FACHE
President and CEO

DDS:ph

JAMESON
MEMORIAL
HOSPITAL
1211 WILMINGTON AVE. · NEW CASTLE, PA. 16105 - 2595
412 - 658 - 9001

HOSPITAL 390016

Amy L. Joyce
Public Relations Director

October 23, 1987

NEWS RELEASE
(for immediate release)

According to Debra Perretta, director of utilization review/social service, application of the Health Care Financing Administration's (HCFA) mortality data is limited not only from a consumer quality perspective, but to those trained in the evaluation and utilization of such information for quality assurance purposes.

Mrs. Perretta said, "The data fails in depicting any meaningful information through the omissions of vital issues." Among them, she said the data fails to address severity of illness indicators, pre-existing or other conditions affecting progress or lack of, expected outcomes and relevant demographic and industry-wide comparative data.

"Although Jameson falls quite favorably within predicted mortality ranges," she said, "the data presented provides little if any usable information."

Vincent Lamorella, vice president of fiscal services, pointed out that research into specific cases presents discrepancies numbering in excess of fifty. Although the majority of these involve placement into diagnostic categories, he said that such variations demonstrate further limitations of using hard data as a quality indicator.

-more-

Mrs. Perretta concluded that, while the data may have an application in siting major variations from expected ranges, such in itself is clearly of no value for any type of valid quality assessment.

# # #

ALJ

Jeannette District
Memorial Hospital

ROBERT J. BULGER
President/Chief Executive Officer

October 14, 1987

William L. Roper, M.D.
Administrator
Healthcare Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

As stipulated in your letter of September 21, 1987 regarding the proposed release of selected mortality information about short term acute care hospitals, I would like the following comments to be made part of the December publication of this data.

My first, and by far the most important, comment about the data is to insure that it is clearly understood that this data does not directly relate to the quality of care that is provided at this or any other hospital. This information cannot be construed to provide anything other than general data and no direct correlation can be made as to the provision of care.

In relation to the data regarding our particular facility our overview has indicated that of the total number of deaths within the time frame indicated, approximately 20% of these occurred post-hospitalization. As a follow on, a sample of these post-hospital deaths indicate that there is an association with terminal diseases. In addition, a review of those deaths that occurred while individuals were patients at this facility, primarily in the low risk categories, indicates that the cause of death was due to a co-morbid condition(s).

We do appreciate the ability to make comments regarding the data as it is presented and to have these comments made part of the record when this information is released.

Thank you.

Sincerely,

Robert J. Bulger
President/Chief Executive Officer

RJB/lv

600 Jefferson Avenue • Jeannette, PA 15644 • (412) 527-3551

A Community Hospital

JFK JOHN F. KENNEDY MEMORIAL HOSPITAL

October 15, 1987

HEALTH CARE FINANCING ADMINISTRATION
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

TO WHOM IT MAY CONCERN:

On behalf of John F. Kennedy Memorial Hospital, I would like to acknowledge receipt of the 1986 mortality data for Medicare patients. We are pleased to note that for all categories, we fall within the range of predicted mortality rates.

We have verified that the deaths did occur in our institution and to the best of our ability, we have tried to obtain information about those patients expiring within 30 days of discharge. We accomplished this through contact with the patient's attending physician. Of the 14 deaths occurring subsequent to discharge from our institution, we were able to follow-up on 13 patients. These charts were reviewed and it was found that the death was not unexpected because of the nature of the patient's illness. In fact, 6 of these deaths occurred in controlled environments such as a nursing home or boarding home.

We would like to note that as part of the hospital's routine quality assurance activity, all medical records of patients who expire are thoroughly reviewed by the Medical Staff and mortality review is a part of clinical department meetings on a regular basis. In addition, the Medical Staff also routinely reviews charts which fall into categories where a potential problem exists. For example, readmissions within a specific time period are reviewed in order to pinpoint problems with premature discharges. A few other examples of review activity include:

--Review of patients admitted from our Short Procedure Unit.
--Transfers from a regular floor to special care units.
--Infection rates in relation to various procedures and treatment modalities such as Swan Ganz catheters and foley catheters.
--Patients who leave against medical advice.

In addition, much retrospective quality assurance activity has been performed. Any problems found are dealt with appropriately and promptly.

There is serious question about the objective of releasing raw statistics without some explanation or comment regarding the many variables effecting statistical differences between institutions. It is to be expected that, in the absence of such comment, the health care consumer will interpret low mortality statistics as an indication of quality. This might well not be the case. The Medical Staff is required to review mortalities. The results of these reviews will better provide one with increased information about a hospital's mortalities.

As hospital mortality statistics are reviewed by consumers, they should be mindful of the variety of characteristics associated with the differences in mortality rates from institution to institution.

Thank you for the opportunity to comment on the data to be released. I hope this will be helpful to the consumer in dealing with information of this nature.

Sincerely,

Earl Stout
Acting Executive Director

ES/ams

The Lankenau Hospital

Lancaster Avenue west of City Line • Philadelphia, Pennsylvania 19151

215-645-2000

October 20, 1987 Medicare Provider Number 39-0195

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C.

Dear Doctor Roper:

We have carefully reviewed those Health Care Financing Administration (HCFA) data submitted to The Lankenau Hospital that claim to relate to mortality among patients admitted during 1986. We realize that in any undertaking of this size and complexity, there will inevitably be data errors. Indeed, we have noted some discrepancies with regard to the frequency of mortality within particular diagnostic categories. Additionally, we were unable to review mortality of patients which took place after discharge and we question the appropriateness of including this information. Despite these concerns, the HCFA data as presented do not suggest inappropriate trends related to mortality at Lankenau; this finding is consistent with our own internal mortality review process. Thus, rather than devote a significant portion of this response to address our concerns about the methods and inaccuracies related to the HCFA data, we felt that it would be more appropriate to expand on issues relevant to the public's understanding of how Lankenau mortality data, presented in the HCFA format, should be appropriately interpreted.

First and foremost, it should be clearly stated that the cornerstone of The Lankenau Hospital's commitment to the patients of the region has always been quality of care. Lankenau places emphasis on this quality through a comprehensive and ongoing Quality Assurance Program. The Board of Trustees, Medical Staff, Management and employees are directly and constantly involved in reviewing and interpreting the information yielded by this Program. Although this Quality Assurance Program extends to all departments and levels of care within Lankenau, it is important to point out that relevant to the issue at hand, Lankenau reviews, through this Program, all mortality which takes place within the Hospital. This review is conducted by Quality Assurance nurses, staff physicians and Medical Department Chairmen. This exhaustive mortality review process, along with the review of many other criteria, allows Lankenau to determine if there are areas of concern with patient management. Although this review mechanism has revealed no significant issues, we feel strongly that it is an appropriate verifiable system designed to insure optimum patient management through quality of care.

It is extremely important to point out that mortality can never be used as an indicator of either good or bad care within a hospital. This is particularly true of the HCFA mortality data released with regard to The Lankenau Hospital. Simply stated, the HCFA data do not measure a number of important patient circumstances that may have a direct relationship to the outcome of their hospitalization. Specifically, Lankenau, while supplying valuable primary care services to the community, is a highly sophisticated referral facility that receives many patients with the most serious, complex and emergent conditions. The HCFA data do not measure the severity of a patient's illness at the time of admission; a variety of comorbid conditions that affect the patient's outcome; where the patient is coming from (another hospital, a nursing home, a boarding home or from a home care arrangement); whether or not the patient is terminally ill; the patient's general health status or psychological state. Further, the HCFA data do not take into account that Lankenau operates a sophisticated Cancer Treatment Center, caring for the most seriously ill cancer patients, a comprehensive cardiology program, receiving the most acutely ill cardiology patients and providing a full component of sophisticated invasive catheterization and surgical procedures, a Hospice Program to care for the terminally ill, and an extremely active Emergency Service that deals with many life-threatening situations. Essentially, the Health Care Financing Administration analysis of mortality data takes into account only those factors that address the average patient. Simply, Lankenau is in a position to care for those patients who are not average, and require expertise and facilities capable of handling illnesses that are more complex, at a later stage and associated with more secondary comorbid factors.

Although the HCFA data presented to The Lankenau Hospital show no inappropriate trend with regard to mortality, Lankenau fully realizes that it cares for patients who are at higher risk based on all those considerations noted above. For this reason The Lankenau Hospital is even more diligent in its quality reviews of patient care.

The Lankenau Hospital applauds the efforts of the Health Care Financing Administration to give the public a better basis of understanding when purchasing health care. Presentation of mortality data, in its current form, is only a very crude beginning in this understanding. No one should infer anything positive or negative from mortality data until many other factors and much more sophisticated statistical techniques are brought into the picture.

Sincerely,

Elizabeth H. Avery
President

LEE HEALTH SERVICES

Lee Hospital

320 MAIN STREET JOHNSTOWN, PA 15901 (814) 533-0123

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Comments on HCFA
Mortality Data

Gentlemen:

The data used by HCFA indicate that a total of 290 Medicare patients admitted to Lee Hospital died within 30 days of admission. Our own records indicate 289 of these patients were treated at Lee Hospital. Of these, 243 died while still patients of the hospital, while 46 died after discharge. A corrected copy of the data is attached.

Our records also indicate that the patient listed in the category "Orthopedic Disorders (OP)" should be listed in the category "Severe Chronic Heart Disease (HH)". This gives Lee Hospital a 0% mortality rate for Orthopedic Disorders.

The HCFA data are not all-inclusive. The mortality rates apply only to Medicare patients. We also are concerned about the use of mortality data as a sole indicator for quality. Currently, the model does not include measures of severity. Lee Hospital treats multiple diseases and has an oncology service.

Lee Hospital is committed to providing quality care. Any indication of potential quality problems, including mortality data, is included in our Quality Review Program.

Sincerely,

John W. Ungar

John W. Ungar
President

Enclosures

mab

JOHN AUGUSTINE, Chairman
ROBERT E. BARRETT, 1st Vice Chairman
H. Jay CLARK, 2nd Vice Chairman
WILLIAM R. HORNER, Secretary
JOHN M. COSTELLO, Assistant Secretary
THOMAS L. CARROLL, Treasurer
FOSTER C. GARRISON III, Assistant Treasurer
JOHN W. UNGAR, President

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

PROVIDER: LEE HOSPITAL #390011

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	29	6	30	5
CE -- Cerebrovascular Accidents	29	4	29	4
GC -- Gastrointestinal Catastrophes	4	1	4	1
GI -- Gastrointestinal Disease	11	2	11	2
GU -- Urologic Disease	3	1	3	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	2	0	2	0
HM -- Severe Chronic Heart Disease	41	7	45	4
HS -- Severe Acute Heart Disease	32	3	33	2
ME -- Metabolic/Electrolyte Disturbances	5	4	6	3
OP -- Orthopedic Disorders	1	0	0	0
PN -- Pulmonary Disease	19	8	19	8
RN -- Renal Disease	1	0	1	0
SE -- Sepsis	15	3	14	3
TR -- Severe Trauma	4	0	4	0
EY -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	41	14	42	13
Total -- All Categories	237	53	243	46

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Lewistown Hospital
4th & Highland Avenue
Lewistown, PA 17044
(717) 248-5411

October 28, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

As per your letter of September 21, 1987, Lewistown Hospital is responding to your request for comments regarding the mortality data you will release to the public in January 1988.

I cannot comment on the accuracy of the data HCFA is releasing as our staff have not yet completed verification of the information. You will be notified of any corrections that are necessary. I would note that Lewistown Hospital cannot verify the overall accuracy of the data as we do not have access to all of the original sources of information.

Lewistown Hospital is pleased that our figures compare favorably with the expected range. The Hospital maintains a very active and progressive utilization review and quality assurance program. Historically, we believe our concern for patient care has resulted in superior outcomes, and I am pleased that your data supports this belief.

On Page 3 of your September 21, 1987 letter, it states:

> "...until we have developed additional statistical measures to deal with complex issues such as severity of illness, we cannot and do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals."

I agree with your statement as our internal statistics indicate measurement of the severity of illness is an essential part of even a rudimentary understanding of the level of quality that is achieved.

Therefore, I do not understand why HCFA has decided to release this data. Lewistown Hospital agrees with HCFA that it is unreliable, and yet it is suggested at the end of your letter that patients can use this information to make informed decisions.

Lewistown Hospital looks forward to working with HCFA and the local Peer Review Organization to develop information that can provide a more accurate measurement of how our hospital is performing. Lewistown Hospital is committed to the delivery of a high standard of patient care and welcomes your assistance in the years ahead as HCFA develops a more meaningful approach to the measurement of patient care.

Thank you for the opportunity to comment.

Best regards,

William H. DeWire

William H. DeWire, FACHE
President

ws
cc: L.H.F. Board of Directors
L.H. Board of Trustees

LOCK HAVEN HOSPITAL

October 26, 1987

Harvey Brook
Health Standards Quality Bureau
6300 Security Blvd.
Meadows East Building
Room 2D2
Baltimore, MD 21207

Provider #39-0071

Dear Mr. Brook:

Below is the Lock Haven Hospital's Data Verification for the HCFA Mortablity Study:

DATA VERIFICATION HCFA MORTALITY STUDY

Data used by HealthCare Financing Administration indicates a total of 866 Medicare patients were admitted to Lock Haven Hospital. Our records show there were 1544 Medicare admissions. Some of the discrepancies may be due to multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at the hospital is correct.

HFCA records indicate that there was 77 patients who died in the hospital while four died within 30 days after discharge.

Of the four deaths that occurred within thirty days after discharge, one was inappropriately charged to Lock Haven Hospital having been transferred to Geisinger Medical Center where the patient expired fourteen days later.

The second one was an eighty year old female who was a resident of a nursing home who was admitted for stabilization and transferred to a nursing home because she has inoperable cancer and was a "do not resuscitate."

The third one was a seventy year old male who was admitted to the hospital for treatment of pneumonia. He was a terminal cancer case and was discharged to home after successful treatment for pneumonia and expired of terminal cancer.

The fourth was a ninety-two year old male who was successfully treated for pneumonia. He was transferred to extended care and expired of cardiac arrest.

24 CREE DRIVE LOCK HAVEN, PA 17745-2699 (717) 893-5000

Other Comments:

It is recognized that the statistical basis is small and therefore is not significant even if the data was understood. We reviewed HL cases 75, HM cases 43, HS cases 39 and pulmonary diseases 87 all of which were in the predicted mortality range.

There were a total of 33 deaths in these disease categories. The average patient age was 76 years old. In addition, there were 17 patients who were "do not resuscitate" at the time of admission. Patient care was appropriate in all cases. The fact that half the patients either themselves or their families suggested no extraordinary means be taken that the patients' deaths are not unexpected.

In the cancer group, the average age was 74. There were 14 deaths of which 8 were terminally ill and were "do not resuscitate."

In the CVA group there 12 deaths and the average age was 73. Nine of these by their family wishes were "do not resuscitate" and were terminally ill.

In the GI catastrophe group, although within predicted mortalities the numbers were small, only 2 of 13 cases. Both cases were terminally ill and stated "do not resuscitate" with an average age of 73 years old.

Sincerely yours,

Al Speth
President

srk

MAGEE-WOMENS HOSPITAL

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Mr. Roper:

We have reviewed the mortality information regarding Medicare patients treated at Magee-Womens Hospital during 1986 and have the following comments regarding its accuracy and interpretation.

1. Hospital records indicate 967 Medicare admissions during 1986 rather than the 722 reported by Medicare. Use of the hospital's statistics would reduce the hospital's overall Medicare mortality rate by 25%. Although we recognize this discrepancy could reflect multiple admissions of individual beneficiaries to different hospitals, this discrepancy seems too large to explain in this manner.

2. All deaths reported by HCFA for 1986 were verified and reviewed against the hospital's quality assurance standards. No cases received a negative standard of care. It was determined that all deaths were expected, including those that occurred following discharge.

3. Twenty-one of the twenty-four deaths occurred in high-risk categories. Of the three remaining deaths, one patient was admitted to the hospital in a hepatic coma and another transferred to the hospital in critical condition.

I thank you for the opportunity to review and comment on this data prior to its public release. We were pleased to see that Magee-Womens Hospital did not exceed the predicted range of mortality rates for <u>any</u>

diagnostic categories. It is my understanding these comments will be presented to the public as supplemental information to be used in interpreting the data. In that regard, I have also attached a detailed review conducted by my staff. If you have any questions or comments regarding this letter, please do not hesitate to contact me.

Sincerely,

Daniel J. Lebish
Assistant Vice President/Finance

DJL:val
Attachment

cc: Geoffrey J. Suszkowski, D.P.S.
Henry J. Smith
Barbara A. Spagnol
Michele Baer
Nancy Blichesz (HAP)
Walter Wayne (HCWP)

MAGEE-WOMENS HOSPITAL

TO: Daniel J. Lebish,
Assistant Vice President/Finance

FROM: Barbara A. Spagnol, Director, Bobbi
Quality Assurance/Utilization Management

SUBJECT: HCFA Planned Mortality Release

DATE: October 21, 1987

The purpose of this memo is to provide you with a summary of the Quality Assurance Department's analysis of the Medicare Deaths for 1986. The hospital's comments must be received by HCFA no later than October 28, 1987. According to the September 21, 1987 cover memo from William L. Roper, M.D., a self-addresed stamped envelope was provided to the hospital to facilitate receipt of comments. A detailed analysis of the 24 deaths has been attached for your review.

DATA VERIFICATION:

The data used by HCFA indicate that a total of 24 Medicare patients admitted to Magee-Womens Hospital died within 30 days of admission. Of these cases, 15 died while they were inpatients and 9 died after discharge. The hospital's records indicate that 967 Medicare admissions occurred in 1986. HCFA's report indicates a total of 722 admissions. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. It is not possible to verify the accuracy of the information regarding a patient who died after discharge.

INTERPRETIVE REMARKS:

Within all diagnostic categories the actual mortality rate was either within or below the range of predicted mortality rates. In the diagnostic categories with deaths, one case was below the range. Four cases were within the range. No cases exceeded the range.

RESULTS OF MEDICAL RECORD REVIEW WITH SECONDARY REVIEWERS:

All 24 deaths were brought to secondary review to assign a Standard of Care. The standard of Care in all cases was positive. It was determined that all deaths were expected, including those deaths that occurred following discharge.

As you are aware, HCFA's method for comparing Hospital Mortality Rates include sorting the deaths into 17 diagnostic categories. Ten categories were determined to be high risk. Six categories were low risk and one category was considered for other cases. Twenty-one of the deaths were considered high risk and three cases were considered low risk. Of the three cases that were considered low risk, one patient was admitted in hepatic coma and the second patient was transferred to the hospital in critical condition. The last case is being re-coded by the Medical Record Department to determine if it is in the appropriate diagnostic category.

attachment

BAS/mag

MEDICARE MORTALITIES

	MEDICAL RECORD UNIT NUMBER	DATE OF DISCHARGE	DATE OF DEATH	IN-HOUSE DEATH	DIAGNOSIS	STANDARD OF CARE	DIAGNOSTIC CATEGORY
1	[redacted]	11/28/86	12/13/86	No	Recurrent uterine sarcoma secondary Enterocutaneous fistula	Positive	CA High
2	[redacted]	3/08/86	3/08/86	Yes	Leiomyosarcoma, high grade	Positive	CA High
3	[redacted]	3/22/86	3/22/86	Yes	Metastasic abdominal carcinoma	Positive	CA High
4	[redacted]	5/30/86	5/30/86	Yes	Breast Carcinoma with left hemiparesis from metastatic carcinoma	Positive	CA High
5	[redacted]	3/15/86	3/15/86	Yes	Mestatic Uterine Sarcoma to lungs	Positive	CA High
6	[redacted]	5/04/86	5/29/86	No	Stage IV clear cell adenocarcinoma of Endometrium	Positive	CA High
7	[redacted]	12/24/86	12/24/86	Yes	Metastatic Stage II Grade I Adenoacanthoma of the Endometrium	Positive	CA High
8	[redacted]	11/08/86	11/08/86	Yes	Stage III Serous cystadenocarcinoma of the Ovary	Positive	CA High
9	[redacted]	8/20/86	8/20/86	Yes	Breast Carcinoma Stage IV Diffuse carcinomatosis possible Ovarian Carcinoma	Positive	CA High
10	[redacted]	11/06/86	11/06/86	Yes	Metastatic pelvic carcinoma probable cervical origin, liver failure	Positive	CA High
11	[redacted]	9/18/86	9/18/86	Yes	Endometrial Carcinoma, restrictive lung disease	Positive	CA High
12	[redacted]	4/12/86	4/13/86	No	Esophageal carcinoma with metastasis to brain	Positive	CA High
13	[redacted]	7/15/86	7/15/86	No	Stage III Grade II Adenocarcinoma of of Endometrium	Positive	CA High
14	[redacted]	10/03/86	10/05/86	No	Metastatic liver carcinoma	Positive	GC High

PA 128.4

Medicare Mortalities (cont'd)

	MEDICAL RECORD UNIT NUMBER	DATE OF DISCHARGE	DATE OF DEATH	IN-HOUSE DEATH	DIAGNOSIS	STANDARD OF CARE	DIAGNOSTIC CATEGORY	
15	[redacted]	8/25/86	8/26/86	No	Stage IV Edometroid carcinoma Ovary	Positive	GC	High
16	[redacted]	9/19/86	9/30/86	No	Large Pelvic mass	Positive	CG	High
17	[redacted]	4/05/86	4/22/86	No	Endometrial carcinoma, Partial small bowel obstruction	Positive	CG	High
18	[redacted]	9/18/86	9/18/86	Yes	Ovarian Carcinoma	Positive	CG	High
19	[redacted]	8/09/86	8/09/86	Yes	Endometrial Carcinoma, bowel obstruction	Positive	CG	High
20	[redacted]	6/10/86	6/10/86	Yes	Cirrhosis of Liver, hepatic coma	Positive	GI	Low
21	[redacted]	4/25/86	4/25/86	Yes	Abdominal Fistula S/P Whipple procedure (Patient was transferred in)	Positive	GI	Low
22	[redacted]	6/17/86	6/17/86	Yes	Carcinoma endometrium, pulmonary embolus	Positive	GU	Low
23	[redacted]	8/16/86	9/05/86	No	Stage III Grade III mixed Mullerian uterine Sarcoma	Positive	ME	High
24	[redacted]	7/12/86	7/12/86	Yes	Metastatic adenocarcinoma of endometrium, Dehydration	Positive	ME	High

PA 128.5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	9	4	9	0
CE -- Cerebrovascular Accidents				
GC -- Gastrointestinal Catastrophes	2	4	2	0
GI -- Gastrointestinal Disease	2	0	2	0
GU -- Urologic Disease	1	0	1	0
GY -- Gynecologic Disease				
HL -- Low Risk Heart Disease				
HM -- Severe Chronic Heart Disease				
HS -- Severe Acute Heart Disease				
ME -- Metabolic/Electrolyte Disturbances	1	1	1	0
OP -- Orthopedic Disorders				
PN -- Pulmonary Disease				
RN -- Renal Disease				
SE -- Sepsis				
TR -- Severe Trauma				
OP -- Ophthalmalogic Disease				
UN -- Other Diagnoses				
Total -- All Categories				

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

THOMAS H. PRICKETT
EXECUTIVE DIRECTOR

October 26, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
200 Independence Avenue Southwest
Washington, D.C. 20201

Dear Doctor Roper,

First, let me thank you for the opportunity to make public our comments and responses regarding the dissemination and interpretation of the data contained in the Mortality Report you sent on September 21, 1987.

I believe that this comment period afforded by H.C.F.A. is crucial to helping the media thoroughly understand the information which is being presented to them. I also believe the information received from hospitals will benefit the media so that an accurate and factual interpretation can be presented to the public, thus avoiding any misconception that could result from the publication of only the raw data contained in the Mortality Rate Listing.

Under any circumstances, patients have the right to make an informed decision about their personal health care. Based on what is perceived as a source of credible information, patients may very well be easily misled by raw data and statistics which can be so easily misinterpreted.

With this in mind, on behalf of McKeesport Hospital, I would like to provide the media with some insight surrounding the inadequacy of the information as it exists in its present form. To provide further review of the statistics we received, McKeesport Hospital internally performed detailed disease and patient demographic analysis. Subsequent to a review of the findings by a team of medical professionals, the following issues were found to be significant.

1. Despite a concerted effort of behalf of McKeesport Hospital to maintain the health and well being of our communities elderly through organized monthly screening and educational programs, the hospital is still faced with the continuing problem of low income medically indigent senior citizens. Because of the economic demise of our area's population over the last decade, it is a real and not perceived problem that the elderly are not seeking health care in a timely manner. The elderly in our community are more economically disadvantaged as well as on the average more aged. Our internal audit revealed that the average age of those Medicare patients who died was 78.3 years. In one audited diagnostic category for example, the average age of those patients who died was 83.5 years.

2. As an advanced teaching hospital, our present hospital admissions more often represent patients who are acutely ill with many having been transferred from other acute care, skilled care, and intermediate care facilities. The majority of the patients show the presence of a multitude of chronic debilitating diseases in addition to the particular disease listed. The current methodology used by H.C.F.A. does not allow for severity of illness staging which would explain why some facilities are experiencing higher death rates.

3. McKeesport Hospital is also used as a comprehensive referral center for treatment of oncology patients, who often become patients here only after the disease is significantly advanced. Our standing as a cancer referral center was founded on the historical basis given the large volumes of cancer patients emanating from our service area. In fact, the Secretary of Health in the State of Pennsylvania in the early 1980's designated McKeesport as having the highest incidence of cancer in the state. The disease of cancer is reflected not only in the Cancer Category, but is often a comorbidity in other categories such as Gastrointestinal Catastrophes and Diseases. In fact, 41% of all our Medicare deaths had a cancer diagnosis as primary or secondary. Hospitals with a reputation for high-quality care tend to be referral centers and tend to attract the most seriously ill patients.

4. This data needs a more elaborate and detailed explanation to ensure that the public is fully informed prior to using it in assessing a hospital's proficiency in treating patients.

   For example, H.C.F.A., by only counting readmission to a facility one time has artificially inflated the mortality rate by excluding previous admissions of the same patient with favorable outcomes.

   Theoretically, you do not want the public to believe that their risk of dying upon admission to a hospital is directly related to the mortality rates as published. Specifically these rates do not take into consideration the fact that a patient could have been admitted and treated at a hospital multiple times throughout the last twelve month period. The data only looks at the last admission immediately preceding a death for a patient and a mortality rate is calculated on that presumption. As such mortality rates look deceivingly high. A primary concern is that these rates might serve to frighten a patient against seeking health care and perhaps lead to a delay in treatment until that patient became acutely ill.

In concluding, McKeesport Hospital stands firmly committed behind the quality of care historically provided. As an administrator responsible for assuring our community we are worthy of them entrusting their lives to us, I would caution the media that misrepresentation of this data to the public could undermine the trust that hospitals have worked so diligently to gain.

Sincerely,

Thomas H. Prickett

Thomas H. Prickett
Executive Director

/ad

MEADVILLE
MEDICAL
CENTER

Medicare # 39-0113

COMMENTS ON HCFA MORTALITY DATA

MEADVILLE MEDICAL CENTER, MEADVILLE, PA

Meadville Medical Center is pleased with the 1986 mortality data released by H.C.F.A. While we feel that a truly accurate evaluation is difficult to do with mortality figures, it is gratifying to note that we fall within the predicted mortality range for all categories and that we are in the low range for overall mortality. However, we would like to point out several areas which deserve mention.

We are a sole community hospital with multiple specialists on our medical staff who draw very ill patients from outside our service area in heart disease, cancer and kidney disease. These categories tend to show a higher mortality rate than they might show otherwise. In addition, those patients who died within 30 days of admission outside our facility may have died from other reasons than that which they were classified when discharged from our facility.

1034 Grove Street 814 • 336 • 4777
751 Liberty Street 814 • 336 • 3121
Meadville, Pennsylvania 16335

The calculated percentage of deaths is statistically misleading since not all patient admissions are counted. For example, there were 369 Medicare patients admitted to Meadville Medical Center who were not counted in the HCFA data for 1986. Had these patients been included, Meadville Medical Center's death rate would have been significantly lower.

We would caution the public against over-interpreting these published statistics. The death rate and predicted death range are specific to each hospital and should not be used for comparison. We do not feel that these statistics are accurate enough to be used in selecting a hospital. We at Meadville Medical Center will continue to work to improve our performance and maintain the excellent support we have had in our service area.

Anthony J. DeFail
Chief Executive Officer

Christopher Thomas, M.D.
President Elect

Medicare # 39-0113

MEADVILLE MEDICAL CENTER
MEADVILLE, PA

CORRECTED INFORMATION

WRONG DISCHARGE DATE

HIC No.	Name	Listed Discharge Date	Listed Death Date	Correct Death Date
[redacted]		9/12/86	9/13/86	9/12/86
		2/28/86	3/01/86	2/28/86
		3/03/86	3/06/86	3/03/86
		9/14/86	9/15/86	9/14/86

DIED IN ANOTHER HOSPITAL

HIC No.	Name	Listed Discharge Date	Listed Death Date	Died At Allegheny General Hospital In Pittsburgh
[redacted]		9/04/86	9/24/86	

MEMORIAL HOSPITAL OF YORK, PENNSYLVANIA
COMMENTS ON THE HCFA RELEASE OF MORTALITY INFORMATION

Memorial Hospital is a 162 bed acute care hospital that has provided quality health care services to the York community since 1945. As a teaching hospital with over 40 physician residents, interns and students and a medical staff of over 150 physicians representing every specialty coupled with technology that far exceeds the norm for a hospital our size, Memorial's commitment to the community for the future is also well established.

It has always been our practice to apprise our community on all relevant health care issues in a timely and public fashion. Yet generating commentary that will accompany the HCFA release of mortality information to the media is a rather perplexing undertaking. Perplexing in the sense that HCFA says that the information is "not intended for quality of care comparisons," yet it seems to lend itself to that very purpose. HCFA's statistics warrant a logical response to a somewhat ambiguous effort.

Upon review of the data provided to us, it became apparent that the numbers as presented show Memorial Hospital's mortality data to be well within its identified predicted standards in every category. We were not surprised by this. We have a formal and aggressive quality assessment program. And, although we're pleased that the data reflect what we believe to be true, that is, that we're a well rounded general health care provider with a competent medical and nursing staff able to treat all diseases from a broad patient mix efficiently and effectively, we're concerned about HCFA's data.

Attempts to quantify quality are always difficult and sometimes dangerously misleading. In this instance, the end product of the HCFA calculations seems to be accurate, however, a thorough examination of the methodology used signals an alarm for the future release of information developed using the same approach.

Many examples exist to demonstrate this point. Some are simple and obvious, others more complicated and beyond the scope and purpose of this response.

A few cases in point which are simple and obvious. Patients, who enter a hospital terminally ill and regardless of the accurate and intense treatment they receive subsequently die, are included in the hospital's statistical profile. Second, the use of the principal diagnosis to determine the diagnostic category does not take into consideration the possibility of

other major medical problems of a sudden onset, such as strokes, myocardial infarctions, etc. A third and somewhat ludicrous example is that a patient dying in an automobile accident or other such unanticipated manner within 30 days of admission to a hospital would be included in the hospital's statistics in the category in which they were admitted. In addition, of special note was that the majority of mortalities in one of our categories were 85 years of age or older.

These examples alone reinforce HCFA's own posture "that the information on its own is not a complete measure of the quality of care at an individual hospital." Further, HCFA states that "while we believe that information on hospital mortality rates is useful, until we have developed additional statistical measures to deal with complex issues such as severity of illness, we cannot and do not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals."

We wonder, how then is the information useful?

October 19, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Gentlemen: Re: Comments on HCFA Mortality Data

The data used by HCFA indicates that a total of 593 Medicare patients were admitted to Memorial Hospital in 1986 and of this number 86 died within 30 days of admission to the hospital. Our records indicate that the hospital discharged 1,003 Medicare patients during 1986 and 72 died while still a patient at Memorial Hospital. With the methodology utilized by HCFA we have no way of verifying whether the number of Medicare patients identified by HCFA is accurate and presumably the discrepancy reflects multiple admissions of individual Medicare patients. Likewise it is impossible to determine the accuracy of patient deaths as information concerning death after discharge is not included in a patient's medical record.

In all of the diagnostic categories the hospital's actual mortality rate falls within the range of the predicted mortality rates. The hospital; however, feels strongly that the studies should not be utilized as a measure of hospital performance. The numbers have many limitations and in no way are as extensive or detailed as the quality review and assurance activities which have been ongoing at Memorial Hospital. Nor do the numbers take into account the individual differences between hospital settings. For example; with our combined skilled nursing unit, more severe patients are frequently transfered to the hospital as a patient's condition worsens and the level of care required increases.

The Memorial Hospital supports HCFA's efforts to improve and monitor quality and appreciates information which helps us focus on our quality assurance activities.

Sincerely,
William B Donatelli
William B. Donatelli, President

WBD/df

Memorial Hospital of Bedford County

R.D. 1, Box 80, Everett, Pennsylvania 15537-9513

Telephone: (814) 623-6161

James C. Vreeland, FACHE
Director

October 22, 1987 Ref: Medicare Provider No. 390117

Statement and Comments of Memorial Hospital of Bedford County **Regarding Mortality Data**

Memorial Hospital of Bedford County reviewed the patient records, documents and circumstances for the mortalities pertaining to the deaths from cancer at that hospital. This analysis was in response to the Health and Human Services statistics (9/21/87) prepared for the Health Care Financing Administration (H.C.F.A.) that identified a small increase in the cancer death rate (52% vs 51%) comparing Memorial Hospital of Bedford County to the national standard.

The Staff believes the borderline high death rate for cancer at Memorial Hospital of Bedford County is largely due to the increased number of patients with cancer being cared for through our new oncology and Hospice Program and the high incidence of advanced malignancy at the time of diagnosis in our population of patients.

The Memorial Hospital of Bedford County , the only full service hospital in the area serves a population of over 43,000 in addition to parts of Fulton, Blair, Somerset and Cambria counties. Prior to 1980, patients with advanced cancer were referred to tertiary treatment centers (Pittsburgh, Harrisburg, Danville's Geisinger, and Philadelphia). Over the past several years, three medical oncologists have established their practices at the hospital and over the past two years, an inpatient and outpatient Hospice program has been in existence. The net result has been an increased number of patients receiving their cancer care locally, and increased patient referrals from physicians outside the hospital's usual service area. The Hospice program has contributed an increased number of terminal cancer patients referred for Palliative Care.

A review of the patients' records reveals the average age of 65 for patients dying of malignancy during the years 1986 through 1987. Of interest, most of the malignancies at diagnosis were

locally or systemically advanced not amenable to cure with surgery, radiation, chemotherapy or combination therapy. It is also believed the advanced disease was largely the result of delay in diagnosis and also a significant number of malignancies occurring in organs that manifest symptoms and stages only in the advanced stages, e.g. pancreas, lung, gastrointestional tract. Interestingly, 20 out of the 33 cancer deaths were deaths occurring in patients enrolled in the hospital's Palliative Care Program.

A review of the high percentage of patients with sepsis deaths shows, again, all 11 of these patients were treated in the Palliative Care Program and this is a normal complication of the delibilitating affect of treating cancer patients.

It is believed the high percentage of mortality rates for cancer directly reflects the increased number of terminally ill patients in Hospice and the higher number of patients with the advanced cancer at diagnosis treated in our institution. The Health and Human Resources report is careful to state this statistic in no way reflects the quality of care in our community.

MERCY CATHOLIC MEDICAL CENTER
Lansdowne Avenue and Baily Road
Darby, Pa. 19023
(215) 237-4000

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

Re Medicare Provider No. 390156

Mercy Catholic Medical Center would like to have the following comments included with the December, 1987, HCFA release of mortality information for our Center:

> "The statistics for Mercy Catholic Medical Center include the Fitzgerald Mercy Division in Darby, Pennsylvania, and the Misericordia Division in West Philadelphia."
>
> "Mercy Catholic Medical Center's mortality rates are within the expected range for all but one of the diagnostic categories."
>
> "We will continue our analysis of all the categories, particularly the one area where we apparently were outside the expected range."

Sincerely yours,

Plato A. Marinakos

Plato A. Marinakos
Executive Vice President

PAM/kab

FITZGERALD MERCY DIVISION
Darby, Pa. 19023

MISERICORDIA DIVISION
Philadelphia, Pa. 19143

Mercy Hospital

MERCY HOSPITAL'S RESPONSE
TO
HCFA MORTALITY DATA

Mercy Hospital, Wilkes-Barre, appreciates the opportunity to respond to The Health Care Financing Administration's (HCFA) plan to publish selected statistical information regarding Medicare mortality rates.

Mercy's commitment to quality patient care is the foundation on which its long history and reputation as a leading healthcare provider has been built. Mercy maintains an in-depth quality assurance program which objectively and systematically monitors and evaluates the quality and appropriateness of all patient care services. We express great confidence in the methodologies that we have put in place to measure and assure quality. The process is managed on an ongoing basis by a staff of Quality Assessment professionals with direction and guidance from an involved and participative Medical Staff and Administration.

Edward M. Stein, Jr., President and Chief Executive Officer of Mercy Hospital said, "Mercy's sincere commitment to quality is a common thread among the Board of Directors, Medical Staff, Administration and employees. This dedication at all levels is the true strength of our organization and the primary reason for our demonstrated excellence in quality."

Mercy achieved excellent results by placing well within HCFA'S predicted range for mortality rates in all 17 diagnostic categories and actually rated below the range for cerebrovascular accidents and at the absolute lowest end of the scale for ophthalmology, gynecology and severe trauma.

Richard Alley, M.D., President of Mercy's Medical Staff responded to the HCFA report by stating, "Mercy Hospital places significant value on the quality of care it provides. Mortality data alone does not give us a precise measure of quality but it does provide us with a guide for peer review purposes. HCFA'S efforts are a first but incomplete step towards developing an adequate model for assessing quality."

25 Church Street Wilkes-Barre, Pennsylvania 18765 717-826-3100
A member of Mercy Med-Care, Inc.

After carefully reviewing HCFA'S data it was discovered that two patients who were included in Mercy's statistics had actually been transferred to another acute care hospital and should have been excluded from the data. This valid exclusion would essentially lower the already favorable overall rate for Mercy. Indepth review of the remaining mortality cases demonstrated the severity of these patients' illnesses at the time of admission. Clear examples of the severity issue are evident in the severe acute heart disease category where close review of the cases demonstrated that several of the patients were in a state of cardiac arrest at the time of admission. Another example is severe chronic heart disease where the title of the category itself can be misleading. This group represents patients with long standing chronic heart disease who were actually admitted in an extremely acute phase or terminal stage of their illness. Despite Mercy's high standard of care and excellent clinical management the acuity level in such cases can sometimes dictate the outcome.

Stein added, "Although we are certainly pleased with the ultimate outcome of HCFA'S study we strongly caution anyone from drawing sweeping conclusions about any hospital from the limited interpretation of the data. We, as an organization support the ideology of measuring quality, but until additional statistical measures are developed and data validation techniques are refined public utilization of the information as a scale for quality should be discouraged."

Mercy Hospital

2500 Seventh Avenue, Altoona, PA 16603 (814) 949-4101

Sister Anne Trzeciak, C.S.F.N.
Executive Director

MEDICARE PROVIDER NUMBER: 390121

October 27, 1987

William R. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

Mercy Hospital of Altoona, Pennsylvania has reviewed the HCFA Mortality Data for 1986. Please be advised that there are several errors in your records which were used to calculate the mortality rates. They are as follows:

I. **Patients to be Excluded from the Report**

1. Patient was never admitted to Mercy Hospital [redacted]

2. Patient was discharged alive; HCFA listed as died in Mercy Hospital [redacted]

3. Patient was transferred to another acute care specialty facility and should not have been included on Mercy Hospital's Mortality List; Correct Facility, Allegheny General Hospital [redacted]

II. **Patients with Incorrect Information**

4. Patient's date of death is incorrect; Corrected date of death, 6/18/87 [redacted]

5. Lacked a procedure code; Addition of procedure code, 3772 [redacted]

6. Erroneous procedure code; Corrected code, 3772 [redacted]

7. Erroneous principle diagnosis code [redacted] Corrected code, 4280
Corrected code, 1622

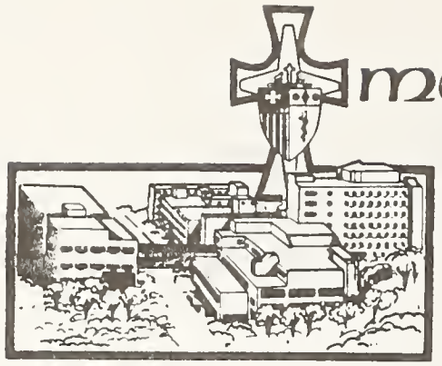
8. Erroneous admission and discharge date; Corrected admission date, 1/1/87; Corrected discharge date, 1/11/87
[redacted]

Sincerely,

Sister Anne Trzeciak CSFN

Sister Anne Trzeciak, C.S.F.N.
Executive Director

SAT:dav



mercy hospital
746 jefferson avenue,
scranton, pennsylvania 18501

10-27-87

COMMENTS ON THE HCFA MORTALITY DATA
Mercy Hospital -- Scranton, Pennsylvania

Data Verification

The data used by HCFA indicate that a total of 425 Medicare patients admitted to Mercy Hospital died within 30 days of admission. Of these, 349 died while still a patient of the hospital, while 76 died after discharge.

Mercy Hospital's data reveals that a total of 424* Medicare patients admitted to Mercy Hospital died within 30 days of Admission (*Patient [redacted] was never a patient at Mercy Hospital during 1986). Of these, 359 died while still a patient of the hospital, while 65 died after discharge.

The above analysis and verification was based on the 3,509 Medicare admissions reported by HCFA. We feel this study did not reveal any information which should lead to a change in hospital policies or that would lead to improved patient care.

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA In-hospital	Deaths Reported by HCFA Post-hospital	Deaths Verified by Hospital* In-hospital	Deaths Verified by Hospital* Post-hospital
CA -- Cancer	54	14	55	13
CE -- Cerebrovascular Accidents	37	3	37	2
GC -- Gastrointestinal Catastrophes	18	1	18	1
GI -- Gastrointestinal Disease	10	6	12	4
GU -- Urologic Disease	2	2	2	2
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	17	4	17	4
HM -- Severe Chronic Heart Disease	29	8	29	8
HS -- Severe Acute Heart Disease	55	9	60	4
ME -- Metabolic/Electrolyte Disturbances	10	4	10	4
OP -- Orthopedic Disorders	5	2	5	2
PN -- Pulmonary Disease	46	2	48	0
RN -- Renal Disease	5	0	5	0
SE -- Sepsis	12	4	12	4
TR -- Severe Trauma	3	1	3	1
OP -- Ophthalmalogic Disease	0	1	0	1
UN -- Other Diagnoses	46	15	46	15
Total -- All Categories	349	76	359	65

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

The Mercy Hospital of Pittsburgh 412-232-7501
1400 Locust Street
Pittsburgh, PA 15219-5166

Mercy Hospital

Kenneth R. Buser, FACHE
Executive Vice President/Chief Operating Officer

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

The Mercy Hospital of Pittsburgh would like to take this opportunity to express our appreciation to the Department of Health and Human Services and the Health Care Financing Administration for the progress made in the statistical methods used to trend the hospital mortality data and most importantly for sharing the data well in advance of release and allowing us to comment.

Please accept the following comments from The Mercy Hospital of Pittsburgh to be included with the data release.

The data used by HCFA indicates that for 1986: a total of 9% of the Medicare patients admitted to Mercy Hospital died within 30 days of their last admission; of these, 99% of the 9% died while still a patient of the hospital, while 1% died after discharge. Our own records indicate that 7% died while still a patient in the hospital. It is not possible for us to determine the percentage of patients dying after discharge as information concerning death after discharge is not included in the patient's medical record. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used inthe analysis.

In none of the diagnostic categories does Mercy's mortality rate fall outside of the range of the predicted mortality rate. For all cases the range of the predicted mortality rate is 9 to 15% and Mercy has an overall actual mortality rate of 9% which is exactly at the beginning of the range. There is only one category in which Mercy's mortality rate is over the midpoint of the range of the predicted mortality rate (SEPSIS). The range for SEPSIS is 24 to 74% and Mercy's mortality rate for 14 deaths is 71%.

Mercy Hospital

For the remaining 15 categories Mercy's mortality rates are as follows.

		Mercy's Rate	Category
1 - Below Range	3 - 8%	2%	Low Risk Heart Disease
2 - At Beginning of Range			
	0 - 70%	0%	Gynecologic Disease
	3 - 10%	3%	Gastrointestinal Disease
2 - Above Beginning of Range by 1%			
	2 - 12%	3%	Urologic Disease
	28 - 46%	29%	Severe Acute Heart Disease
4 - Above Beginning of Range by 2%			
	20 - 35%	22%	Cancer
	9 - 29%	11%	Gastrointestinal Catastrophes
	18 - 31%	20%	Severe Chronic Heart Disease
	1 - 5%	3%	Orthopedic Disorders
2 - Above Beginning of Range by 3%			
	20 - 38%	23%	Cerebrovascular Accidents
	15 - 29%	18%	Pulmonary Diseases
1 - Above Beginning of Range by 4%			
	0 - 55%	4%	Ophthalmologic Disease

3 - Above Beginning of Range by More Than 4%

15 - 39%	22%	Metabolic Disturbances
13 - 56%	29%	Renal Disease
5 - 23%	10%	Severe Trauma

Heart disease, stroke, lung disease and orthopedic problems account for about 36% of all deaths. This is compared to a nationwide figure of 35% for the same categories.

A review of the patients medical records who were assigned the diagnostic category of SEPSIS and expired within 30 days of admission revealed an average age for the group of 81 years and an average length of stay of 4.3 days. One patient expired 7 days after discharge in a nursing home.

A review of the medical records of the 10 patients with a principal diagnosis of Sepsis who expired within 30 days of admission to the hospital revealed that all patients were acutely ill (unresponsive, obtunded, increased respiratory distress, respiratory arrest, decreased level of consciousness, rapidly deteriorating) upon admission. The group of patients had many long-standing, underlying conditions of a severe or life threatening nature which were reflected in the medical record but not reflected in the assignment to a DRG.

A DRG is supposed to indicate a relatively homogeneous group of patients; however, in reality there is great variation in the patients within a DRG. The DRG number is typically determined by the principal diagnosis, which is the reason the patient is admitted to the hospital. Although some DRG's do consider whether the patient has complications, they do not recognize the severity of the patient upon admission, the seriousness of the complications or even the number of complications. The data does not take into account the condition of the patient, be it from illness or accident, on admission. Nor does it distinguish terminally ill patients.

A review of the patient's medical records who were assigned to the diagnostic category of Metabolic/Electrolyte Disturbances and expired within 30 days of admission revealed an average age for the group 75 years and an average length of stay of 8.6 days. Four patients expired after discharge. Two expired in a Hospice and two in a nursing home. These patients had a known history of cancer and extensive past medical history of multiple problems and presented at the hospital with a decreased level of consciousness and were extremely dehydrated.

A review of the patient's medical records who were assigned to the diagnostic category of Severe Chronic Heart Disease and expired within 30 days of admission revealed an average age of 76 years with an average length of stay of 7.1 days. Seventy four percent of the patients in this group presented at the Emergency Room and were admitted to the hospital. This group of patients had an average of seven secondary long standing life threatening diagnoses (Myocardial Infarction - Ischemic Cardiomyopathy - Intractable CHF - Bilateral Pleural Effusion - Respiratory Arrest - Ventricular Tachycardia - Esophageal Hiatal Hernia - Osteoporosis - Aortic Stenosis - Mitral Insufficiency - Urinary Tract Infection - Arteriosclerotic Heart Disease - Renal Failure - Chronic Obstructive Pulmonary Disease - Cardiac Arrest - Rheumatic Heart Disease - Coronary Artery Disease - Pneumonia). The patients were acutely ill upon admission, in distress, could not lay flat and many had pneumonia.

Further review of all cases revealed that the average age for the mortalities reported was 74 years and that the patients were acutely ill with many secondary extremely complicated illnesses.

The data does <u>not</u> reflect pre-hospital services and treatment; the advanced stage of the patient's illness which necessitated admission to the hospital; quality of care rendered; type of hospital providing treatment, be it a tertiary hospital and/or a trauma center; presence of multiple secondary complicating illnesses; or the severity of the patient's disease. Likewise, to attribute a patient's death to a hospital because the death

occurred after discharge but within 30 days of the last hospital admission does not measure quality of care or the patient's compliance with prescribed treatment regimens.

Thank you for the opportunity to comment on this data.

Sincerely,

Kenneth R. Buser

Mr. Kenneth R. Buser, FACHE
Executive Vice President/Chief Operating Officer

KRB/pr

cc: Sister Joanne Marie Andiorio, R.S.M.
President & Chief Executive Officer

The Mercy Hospital of Johnstown

1020 FRANKLIN STREET JOHNSTOWN, PENNSYLVANIA 15905-4186

TO: Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

FROM: The Mercy Hospital of Johnstown
1020 Franklin St.
Johnstown, Pennsylvania 15905
Provider Number - 390060

Mr. T. Baranik
President

DATE: October 28, 1987

RE: Comments on the HCFA Mortality Data

Data Verification

The data used by HCFA indicates that a total of 169 Medicare patients admitted to The Mercy Hospital of Johnstown died within 30 days of admission. Of these, 137 died while still a patient of the hospital, while 32 died after discharge. Our own records indicate that 2484 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries. Our own records also indicate that 31 of the listed deaths occurred post discharge and that one of the cases was duplicated on the report, resulting in 168 deaths total. A corrected copy of the report is attached. It is impossible to determine the percentage of the 31 patients dying after discharge who were in fact alive as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

General Comments

Although The Mercy Hospital of Johnstown had no category in which the mortality rate was outside the predicted range, we feel that it is important to comment on factors that should be considered in interpreting the HCFA data.

The assigned category classification is based on the patient's principal diagnosis - the illness that caused the patient to be admitted. However, the principal diagnosis may not be the cause of the patient's death. Eighty percent of the patient's assigned to the category Low Risk Heart Disease died as the result of a high risk event or condition, i.e. cardiac arrest, ventricular arrhythmia. This was also the case in Gastrointestinal Disease where 67% of the deaths were directly related to a high risk condition.

Another significant factor, not considered by HCFA, is whether patients were admitted to the hospital directly from a long-term care facility. Chronic conditions were considered. However, individuals in long-term care institutions frequently have more severe or multiple manifestations of these conditions, and residence itself in an institutional setting can predispose patients to the development of certain conditions, i.e. infections. Out analysis of the category Sepsis reflects this fact. Our data reveals that 50% of the mortalities in this category were admitted directly from a long-term care facility in a septic state.

Chronic renal disease was also considered as a comorbid condition. It is not clear, however, whether the use of hemo or peritoneal dialysis was considered as a factor that could result in an increased mortality rate. Our facility is a regional dialysis center. The need for dialysis reflects the severity of the renal disease present and compounds the patient's overall medical treatment and response to treatment. The presence of dialysis catheters provides a potential means for the development of infectious or other complications that persons not needing dialysis may not develop.

A patient's death must also be assessed in light of his/her's or the family's desire to not use life support measures or extraordinary means to preserve life. And finally an analysis of any set of mortality statistics is incomplete without consideration of the patient's severity of illness.

Methodist Hospital

2301 South Broad Street
Philadelphia, PA 19145

MEMORANDUM

TO: Health Care Financing Administration

FROM: Methodist Hospital, Philadelphia, PA
Provider Number 39-0205

DATE: 22 October 1987

RE: Comments on Mortality Data

Methodist Hospital has reviewed the mortality data provided to the Hospital by HCFA. The data used by HCFA indicate that 2122 Medicare patients were admitted to the Hospital during 1986, and of these, 250 Medicare patients died within 30 days of admission. Of the 250 deaths indicated by HCFA, 229 died while still a patient at the Hospital and 21 died following discharge.

The Hospital's own records indicate 3648 Medicare admissions throughout 1986. Presumably, the discrepancy reflects multiple admissions of individual beneficiaries to the Hospital, although this cannot be verified. Furthermore, Hospital records indicate 231 deaths of Medicare patients while still hospitalized. It is impossible for the Hospital to verify the number of patients dying after discharge since information regarding death after discharge is not included in the patient's medical record. The Hospital has included a corrected copy of the individual listing with this memorandum.

Methodist Hospital has no specific comments on the published data since the Hospital had no mortality rates which fell outside the predicted ranges. A general comment, however, - while mortality rates, by themselves, are not measurements of quality, Methodist Hospital has recognized the value of reviewing mortality as one component of its Quality Assurance Program for quite some time. Methodist Hospital reviews every death at the Hospital to determine whether the death was expected or not expected. If a death occurs which was not expected, in-depth peer review of the case is undertaken to determine whether the quality of care was appropriate. The Hospital monitors the results of all mortality review in order to determine whether any patterns which would require corrective action develop over time. To reiterate however, mortality rates alone are not indicaters of quality and mortality review is just one component of a comprehensive Quality Assurance Program at Methodist Hospital.

Respectfully submitted,

Joseph A. Ierardi
President & Chief Executive Officer

JAI:md

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

METRO HEALTH CENTER
252 WEST 11th STREET • ERIE, PENNSYLVANIA 16501 • 814/455-3961

October 20, 1987

Attention: William L. Roper, M.D., Administrator HCFA

In response to the pending mortality rate release, I am submitting the following comments and points of interest. The HCFA information and hospital records are different. There are 1406 hospital admissions, 59 deaths in-house and 14 post hospitalization deaths as opposed to the HCFA report of 788 Admissions, 49 in house deaths and 14 post hospitalization deaths.

The release itself includes exclusive Medicare recipients. That in itself points to the elderly population, who have numerous chronic conditions that attribute to their demise, Hospital specific factors include the following:

The average age of the patients included in the statistics is 76.7.

Calendar year 1986 we had 1406 Medicare admissions of which 59 expired during their hospital stay, 11 who expired within a year of their transfer to an Extended Care Facility, and 3 within a year of the previous discharge.

The principle diagnosis listed on the released are classified into high risk and low risk diagnosis. Of the 73 patients listed 68 were admitted with and treated for the high risk diagnosis. Of the 5 remaining, further examination of their expiration reveals the diagnosis listed as their principle diagnosis was not the reason for their death. As explained fully in the past, the definition of the principle diagnosis is "after study the reason the patient was admitted to the hospital." In the 5 cases mentioned, the secondary condition was considered a high risk diagnosis.

In closing, I would further like to point out that the media should completely understand the release before it becomes public knowledge. There is no "quality of care issues" that can or should be interpreted from this data release.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Analysis of Quality Care can only be determined from individual case review, not from bulk data and out of context statistics.

Sincerely,

Lynne Laddy RN

Lynne Laddy, R. N.
Director DRG Services

LML/gmm

ATTACHMENT 5

METRO HEALTH CENTER ERIE, PENNSYLVANIA PROVIDER 390193

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	8	3	9	3
CE -- Cerebrovascular Accidents	9	1	11	1
GC -- Gastrointestinal Catastrophes	2	0	2	0
GI -- Gastrointestinal Disease	3	0	3	0
GU -- Urologic Disease	1	0	1	0
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	2	0	2	0
HM -- Severe Chronic Heart Disease	6	1	6	1
HS -- Severe Acute Heart Disease	8	2	12	2
ME -- Metabolic/Electrolyte Disturbances	1	2	1	2
OP -- Orthopedic Disorders	1	0	1	0
PN -- Pulmonary Disease	5	2	5	2
RN -- Renal Disease	0	0	0	0
SE -- Sepsis	0	0	3	0
TR -- Severe Trauma	1	0	1	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	2	3	2	3
Total -- All Categories	49	14	59	14

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

METRO HEALTH CENTER
ERIE, PENNSYLVANIA

PROVIDER 390193

PATIENTS NOT INCULDED IN THE MORTALITY INFORMATION

PATIENT	BIRTHDATE	ADMISSION	DISCHARGE(expiration)
[redacted]	9-19-05	1-24-86	1-29-86
[redacted]	4-15-08	2-8-86	2-9-86
[redacted]	9-30-06	3-5-86	3-9-86
[redacted]	3-6-12	3-12-86	3-26-86
[redacted]	2-27-25	3-18-86	4-1-86
[redacted]	7-30-06	3-31-86	4-6-86
[redacted]	4-4-16	5-12-86	5-19-86
[redacted]	9-14-04	5-11-86	5-26-86
[redacted]	2-24-1897	8-21-86	9-17-86
[redacted]	2-2-18	10-6-86	10-13-86

METROPOLITAN HOSPITAL

Executive Offices
801 Arch Street, Fifth Floor
Philadelphia, Pennsylvania 19107
(215) 238-2000

October 23, 1987

William L. Roper, M.D.
Administrator, Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

This letter is written in response to your call for comments concerning your agency's pending release of Medicare mortality statistics. It is written representing all three of our hospital divisions: Central, Parkview and Springfield.

Our combined medical and administrative staff, in reviewing the reported data from our facilities, has identified five specific areas of concern relating to the methodology of data collection.

1. The statistics do not reflect deaths only within the hospital, but rather regional mortalities. This obscures the total number of hospital specific deaths as well as the definitive etiology of each mortality.

2. The mortality rates, in somes categories, use a ratio of deaths to total case numbers which proves to be statistically insignificant because of a limited number of cases.

3. The statistical model does not take into consideration any pre-disposing and/or co-existing morbidity factors.

4. The mortality rates reported only reflect Medicare patients and therefore do not characterize overall hospital mortality statistics, a point which may be misunderstood by the general public.

5. The statistical model has not been published in a simplified version for hospital interpretation and comment.

Metropolitan Hospital applauds the Federal Government's efforts to create an educated public, particularly in the area of health care. However, the material produced must be statistically accurate, reproducible, and most of all in a form which will not mislead or confuse the American people.

Sincerely,

Stephen M. Patz
Chief Executive Officer

Richard A. Anderson, D.O.
Medical Director/D.M.E.

CENTRAL DIVISION
201 North Eighth Street
Philadelphia, Pa. 19106
MEDICARE #: 39-0059

PARKVIEW DIVISION
1331 East Wyoming Avenue
Philadelphia, PA. 19124
MEDICARE #: 39-0234

SPRINGFIELD DIVISION
190 West Sproul Road
Springfield, Pa. 19064
MEDICARE #: 39-0155

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October 23, 1987

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October 23, 1987

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MEDICARE #: 39-0155

MID-VALLEY HOSPITAL ASSOCIATION

PECKVILLE, PENNSYLVANIA 18452-0158

— PHONE: 489-7546 --

Medicare Provider # 390109 October 14, 1987

William L. Roper, MD
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, DC 20201

RE: COMMENTS ON MORTALITY STATISTICS

Dear Dr. Roper:

We have reviewed the mortality data information supplied to us by your organization. After review of this data by our Director of Nurses and DRG Coordinator, the information was submitted to our Utilization Review Committee for comment. Enclosed you will find the summation.

Sincerely,

Roy W. Simpson, MD
Chairman of Utilization Review Committee
Chairman of the Board of Directors

RWS/KC/DF/DH

MID-VALLEY HOSPITAL ASSOCIATION

PECKVILLE, PENNSYLVANIA 18452-0158

— PHONE: 489-7546 --

PROVIDER # 390109

MORTALITY REVIEW COMMENTS AND FINDINGS

The Utilization Review Committee feels that all of the mortalities fell well within the predicted range. It was found that due to many of the patients' advanced age, multiple medical conditions and major organ failure that their prognosis was poor prior to their admission to the hospital.

Some of the patients were suffering from a terminal stage of carcinoma and the families did not want any heroic measures taken.

Many of the patients had both End Stage Heart and Renal Disease with their conditions being irreversible.

The patients were seen in consultation by specialists when indicated, but due to their cumulative disease processes nothing more could be done for some of the patients.

There were some patients who arrested at home and were unable to be resuscitated by the time they arrived at the hospital.

A few patients were admitted with histories of previous strokes and who died from complications of pneumonia.

It was determined from the review of the patient's records that those patients suffering from End Stage Renal disease were not good candidates for renal dialysis.

Some patients that died at this facility were those that had come to us from nursing homes in a very debilitated condition, usually presenting with dehydration, septicemia and accompanying septic shock.

Several patients had suffered from massive heart attacks.

There were also some patients who had a long history of chronic lung disease who went into acute respiratory failure and despite intubation and mechanical ventilation the patients failed to thrive.

SUMMARY:

The review of the mortality information revealed that the ages of most of the patients that died were in their late 80's and 90's, that most had major organ failure and that many of their conditions were irreversible. It was felt by the Utilization Review Committee that appropriate and adequate treatment was rendered.

10/14, dmh

Millcreek
Community
Hospital

5515 Peach Street, Erie, PA 16509 (814) 864-4031

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health and
Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

This letter is in response to the mortality information specific to Millcreek Community Hospital. All cases have been reviewed and numbers have been found to be correct as far as admission date, discharge date, and date of death. However, only inpatient, extended care facility, and emergency room deaths were verified. Home deaths were not verified. A breakdown is as follows:

Inpatient Deaths	57
Home Deaths	12
Extended Care Facility Deaths	8
Emergency Room Deaths	1
TOTAL DEATHS CREDITED TO MILLCREEK COMMUNITY HOSPITAL	78

All deaths specific to Millcreek Community Hospital fell within the range of predicted mortality rates. Deaths occurred in the following diagnostic categories:

DIAGNOSTIC CATEGORY	DEATHS	MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
High Risk			
CA--Cancer	11	14%	16 to 47%
CE--Cerebrovascular Accidents	4	5%	13 to 51%
HS--Severe Acute Heart Disease	8	10%	19 to 63%
HM--Severe Chronic Heart Disease	8	10%	12 to 36%
GC--Gastrointestinal Catastrophy	2	3%	3 to 65%
ME--Metabolic/Electrolyte Dist.	4	5%	8 to 42%
PN--Pulmonary Disease	11	14%	11 to 27%
RN--Renal Disease	1	1%	7 to 59%
SE--Sepsis	2	3%	11 to 87%
TR--Severe Trauma	2	3%	1 to 40%
Total High Risk Deaths	53		
Low Risk			
EY--Ophthalmologic Disease	0	0%	0 to 100%
GY--Gynecologic Disease	0	0%	0 to 72%
HL--Low Risk Heart Disease	2	3%	1 to 12%
GI--Gastrointestinal Disease	4	5%	2 to 15%
GU--Urologic Disease	2	3%	2 to 21%
OP--Orthopedic Disorders	1	1%	0 to 17%
Total Low Risk Deaths	9		
UN--All Other Conditions	16		

Although Millcreek Community Hospital fell within or below the ranges of predicted mortality rates, it is still a concern that the public could misinterpret the information. Therefore, I would hope that the Health Care Financing Administration will present all the appropriate information to consumers in a clear, concise, and understandable manner.

Thank you for the opportunity to respond to this important issue.

Sincerely,

MILLCREEK COMMUNITY HOSPITAL

Mary Eckert

Mary L. Eckert
Executive Director

smw

Monongahela Valley Hospital Inc.

Country Club Road
Monongahela, PA 15063
412-258-2000

MEDICARE PROVIDER NUMBER: 390147

October 23, 1987

William R. Roper, MD
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

The following are the comments prepared by Monongahela Valley Hospital, Inc. relating to the HCFA Mortality Data for 1986:

The data used by HCFA indicates that a total of 3,079 Medicare patients were admitted to Monongahela Valley Hospital in the year 1986. Hospital statistics indicate that a total of 5,494 Medicare patients were actually treated in our Hospital during that time frame. The discrepancy presumably reflects multiple admissions of Medicare beneficiaries to our facility during that time period which HCFA deleted from the calculations.

HCFA further identifies 338 Medicare patients who expired within thirty days of an admission to Monongahela Valley Hospital in the year 1986. Following verification of this data, the Hospital has identified five (5) patients which should be deleted from the study. Three (3) of these patients were transferred alive to tertiary care hospitals in Pittsburgh, Pennsylvania and subsequently expired at those hospitals. The remaining two (2) patients were readmitted to Monongahela Valley Hospital following the admission in question and expired at our Hospital in 1987. This would eliminate the patients from the time frame of the study. A confidential listing of the corrected information is attached for your review.

Of the remaining 333 cases, HCFA indicates that 268 Medicare patients expired at Monongahela Valley Hospital. These deaths were verified by Hospital

personnel and found to be accurate. The remaining 65 cases on the report involved patients who expired following discharge from our facility. While these deaths could not be verified by Hospital personnel, their last inpatient admission was reviewed. These cases were found to include patients with terminal or chronic illnesses in which death was not an unexpected outcome. These patients, however, had achieved the maximum benefits of inpatient hospital care and were discharged to alternate health care settings (i.e., skilled nursing facility, hospice, intermediate care facility, personal care facility, home health care services, etc.).

While Monongahela Valley Hospital was satisfied to see that our actual mortality rates fell within the range of the predicted mortality rates, it is important to note that mortality rates are not indicators of quality of care. Quality relates to the appropriateness of care provided consistent with standards of good medical practice and tailored to the specific condition and wishes of the patient.

While the Hospital believes quality of care is being provided at our institution, the HCFA data does not make a statement about that quality of care. Many deaths occurred in patients between the ages of 80 and 90 in which death was an expected occurrence. The information also does not reflect patients or families who specify that no extraordinary measures are to be taken to prolong the patient's life which occurred in several of our cases.

Hospitals have ongoing quality assurance and utilization review programs to constantly monitor such factors as patient condition, medical intervention and patient outcome. These programs are further monitored and evaluated by regulatory agencies and third party payors. These activities must be appropriately performed by individual hospitals and physicians who could be held legally responsible for the patients during their inpatient hospital treatment. The sensationalism of publishing mortality rates to possibly make a statement about quality of care provided in hospitals is unfair and unjust when hospitals go

to such extremes to provide and monitor quality of care on an ongoing basis.

In closing, I state that quality comparisons between hospitals must not be based on this data. The misinterpretation of the data by the public would be a disservice to consumers and area hospitals.

Very truly yours,

Donna L. Ramusivich

DONNA L. RAMUSIVICH, RRA
Director of
Medical Support Services

DLR/lem
Attachments as stated.

cc: Mr. Anthony M. Lombardi
President and Chief Executive Officer

Mr. Louis J. Panza, Jr.
Vice President of Finance/CFO

MONSOUR MEDICAL CENTER

70 LINCOLN WAY EAST • JEANNETTE, PENNSYLVANIA 15644 • 412 527-1511

October 27, 1987

Mr. Harvey Brook
Health Standards and Quality Bureau
Room 2-D-2
Meadows East Building
6300 Security Blvd.
Baltimore, MD 21207

Dear Mr. Brook:

Enclosed you will find the hospital identification data sent to us regarding mortality statistics. The patient marked in red did not expire on June 27, 1986. She signed out of the hospital against medical advice. Our billing department assigned an incorrect code when the patient left the hospital thus she is included in our mortality data. Our billing department is correcting this error. This patient should be deleted from our data.

Sincerely,

Linda Bonacci

Linda Bonacci RN
Director, UR/QA

LB/mji
Enclosures

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

MONSOUR MEDICAL CENTER

70 LINCOLN WAY EAST • JEANNETTE, PENNSYLVANIA 15644 • 412 527-1511

COMMENT ON HCFA MORTALITY DATA

The data used by HCFA indicate that a total of 74 medicare patients admitted to Monsour Medical Center in 1986 died within thirty days of admission. Of these, HCFA indicates 67 died while still a patient of the hospital, while seven died after discharge. Our own records indicate that a total of 73 Medicare patients admitted to Monsour Medical Center in 1986 died within thirty days of admission. Of these, 66 died while still a patient of the hospital and seven died after discharge. It is impossible to determine the percentage of the seven patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record. Our own records indicate that 1,851 Medicare admissions occurred in 1986 while HCFA documents 903 cases used in this study. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to the hospital.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

In all of the diagnostic categories, the hospital's actual mortality rate falls within or <u>below</u> the range of the predicted mortality rate. At least 78% of the hospital's total mortalities were admitted through our Emergency Room and at least 50% were so severely ill as to need admission to the intensive care unit.

Of the seven patients who died after discharge from the hospital, all had <u>multiple</u> problems. Six of the patients were ordered "no resusciation" while hospitalized. In all cases, discharge planning was initiated early and each patient was followed closely by Social Service throughout their hospital stay. Six of the patients were discharged to extended care facilities because of the inability to maintain adequate care at home. Due to the severity of the patient's diagnosis and other complicating conditions, none of these deaths were unexpected.

In conclusion, we would like to emphasize the fact that since assessing the quality of care involves the review of many elements, the limited amount of information provided in this mortality data release, cannot solely nor accurately measure the institution's quality of care provided to it's patients.

Bringing Care & Science to Life **Montefiore Hospital**

Corporate Member and Teaching Hospital
University Health Center of Pittsburgh

3459 Fifth Avenue
Pittsburgh, Pennsylvania 15213
(412)648-6000

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
P.O. Box 26684
Baltimore, MD 21207

Montefiore Hospital's mortality statistics for "All Causes" for 1986 fell within the predicted range according to the Health Care Financing Administration's (HCFA) data — despite the failure of the HCFA formula to include severity of patient conditions. Montefiore's inner city location coupled with its University teaching and tertiary care mission results in a mix of patients with very high severity of illness.

As further evidence of the extent to which Montefiore Hospital's patient mix is affected by the severity factor, you should be aware that a recent Blue Cross/Blue Shield of Western Pennsylvania case mix study revealed that Montefiore Hospital has the highest severity case mix of Blue Cross patients in Western Pennsylvania. In part, this results from a broad range of the Hospital's tertiary programs, its Medical School affiliation, and its inner city location.

Notwithstanding the inadequacy of HCFA's formula to reflect these factors, specifically in two HCFA categories where severity is included by definition, Severe Chronic Heart Disease and Severe Acute Heart Disease, Montefiore's mortality rates were below the predicted range by two and three percent respectively.

Further, in five of the 17 categories separately analyzed by HCFA, Montefiore's mortality rates were at the bottom or below the predicted range. In two categories Montefiore was slightly above the predicted range: Sepsis and Severe Trauma.

"Septicemia" is a diagnosis which indicates the presence of bacterial toxins in the blood. "Severe Trauma" includes patients admitted for a wide range of conditions ranging from severe fractures to injury of internal organs and brain injuries. Four factors should be considered when interpreting HCFA's statistics:

1) Severity of Illness. As previously pointed out, severity of illness is one of the major factors affecting the HCFA formula used for predicting hospital mortality rates, and given the Hospital's case mix, this quite likely affected our standing statistically.

2) Small Number of Admissions. Septicemia and Severe Trauma patients each represented only about one percent of total Medicare patients treated at Montefiore Hospital in 1986. HCFA acknowledged, "The smaller the number of admissions, the less reliable are the statistics, as the impact of random variation of outcomes in individual cases is greater."

3) Transfer of Tertiary Patients from Other Area Hospitals. Deaths ascribed to hospitals included cases where patients had been transferred from another facility. The Hospital is widely recognized for the expertise of its Infectious Disease academic faculty, and as a result, receives a disproportionate share of the most difficult and severe Septicemia cases.

4) Death after Discharge. Deaths of patients within 30 days after discharge from the hospital are counted as though they occurred within the hospital. But death after discharge may be unrelated to the cause of hospitalization and is not necessarily related to the care a person received while a patient.

An in-depth review of medical records in these two groups showed the following significant findings:

Septicemia.
The average age of these patients was 79 years; 64% were over 75, 36% over 80. Fifty-four percent of Septicemia patients were transferred to Montefiore Hospital from other facilities, which include extended care facilities, boarding homes and other acute care facilities. Fourteen percent of the patients in this group were, in fact, discharged from Montefiore and did not expire here. These patients died an average of 7.2 days after discharge from the Hospital.

Septicemia patients had an average of five co-morbid or coexisting medical conditions: 40% had Pneumonia; 36% had Chronic Renal Failure; and 36% had Urinary Tract Infections.

Trauma.
The average age of these patients was 84 years; 27% were over 90, 64% over 80. Patients transferred into Montefiore Hospital from extended care facilities or other acute care facilities accounted for 64% of this group. Forty-five percent of the patients were discharged from Montefiore Hospital and died an average of nine days later.

These patients were admitted with an average of three co-morbid conditions. Eighty-two percent of the patients had encountered a surgical procedure relative to their traumatic injury.

In closing, I must emphasize the fact that mortality rates by themselves do not measure quality. Precise statistical methods cannot predict medical outcome when medicine itself can not predict outcome. Health care is not and should not be limited to only those cases where the odds of success are good. In addition, this hospital's mission, which includes its commitment to patient care, education and research, through its own internal quality assurance function provides a truer basis on which to measure quality. We would be pleased to provide interested parties with detailed information regarding our own internal quality assurance program.

Sincerely

Irwin Goldberg
President
Montefiore Hospital
Medicare Provider Number 390229

/mk

Moses Taylor Hospital
700 Quincy Avenue. Scranton. PA 18510
(717) 963-2100

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Enclosed are Moses Taylor Hospital's comments in response to the Health Care Financing Administration's mortality information about Medicare patients treated in Moses Taylor Hospital in 1986.

These comments are being submitted for inclusion in your December, 1987 publication of selected mortality information about all short term acute care hospitals which treated Medicare patients in 1986.

Sincerely,

James L. Kinney
President

Moses Taylor Hospital
700 Quincy Avenue, Scranton, PA 18510
(717) 963-2100

In the Health Care Financing Administration's (HCFA) diagnostic category "Severe Acute Heart Disease," Moses Taylor Hospital's actual mortality rate falls above the range of HCFA's predicted mortality rate.

Quality of care is of the utmost concern to Moses Taylor Hospital. Any indication of potential quality problems, such as this higher than predicted mortality rate, leads to a prompt investigation to determine if a problem does, in fact, exist.

The predicted range of mortality rates for the diagnostic category "Severe Acute Heart Disease" is 27 to 48 per cent, according to HCFA. Moses Taylor Hospital's actual mortality rate, as reported by HCFA, is 49 per cent.

Moses Taylor Hospital carefully reviewed the patient records of the 92 cases reported in the HCFA diagnostic category of "Severe Acute Heart Disease." In 45, or 49 per cent of these cases, death resulted. In nine of these 45 cases, the patient was in cardiac arrest before arriving at

The HCFA data also failed to take into account the fact that Moses Taylor Hospital's patient mix includes an unusually large number of Medicare-age patients, representing approximately 56 per cent of all discharges. Hospitals with this type of patient mix will obviously show up in the HCFA report with as exhibiting excessive mortality rates.

The HCFA model also fails to consider that some hospitals serve their communities as regional referral centers for severely or acutely ill patients. Moses Taylor Hospital, for example, is a regional center for the treatment of end stage renal disease. In the diagnostic category of renal disease, HCFA's range of predicted mortality rates is 15 to 50 per cent. Moses Taylor Hospital's actual mortality rate, as reported by HCFA, is 44 per cent, or 18 out of 41 cases.

However, 12 of those 18 cases were referrals of severely ill renal patients from other institutions to Moses Taylor. As a result, hospitals like Moses Taylor, with specialized programs for the severely ill, may have a "high" HCFA mortality rate in certain diagnostic categories.

Moses Taylor Hospital is committed to providing quality care. Every death that occurs at Moses Taylor Hospital is reviewed by a medical staff peer review committee to determine if the best possible care was rendered. If any problems are identified, steps are immediately taken to remedy these problems. We will continue to take any and all actions necessary to ensure the provision of the highest quality of care.

the Moses Taylor Hospital Emergency Department. In another nine cases, the patient, or his/her family, requested that no extraordinary means be taken to prolong the patient's life. In these cases, death was the expected, rather than the unexpected, outcome.

In 14 of the 45 cases, the patient died within 24 hours of admission to Moses Taylor Hospital. In 23 of the 45 cases, the patient died within 48 hours of admission. In these cases, death was already a significant possibility when the patient arrived at the hospital.

The HCFA mortality analysis takes into account any one of eight significant complicating, or comorbid, conditions. Moses Taylor Hospital's analysis reveals that in 29 of the 45 cases in the diagnostic category of "Severe Acute Heart Disease," there were <u>two or more</u> significant comorbid conditions present. In 14 cases, <u>three or more</u> comorbid, or complicating conditions were present.

The HCFA methodology failed to include any consideration of severity of illness, such as how ill the patient was at the time of admission to the hospital, or whether the patient had a terminal illness. Moses Taylor Hospital's review of the cases in the category "Severe Acute Heart Disease" reveals that many of these patients came to the hospital already severely ill, with significant complicating conditions. When these factors are considered, the hospital's mortality rates for this diagnostic category are quite understandable.

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Re: Medicare Provider #39-0263

Dear Dr. Roper:

I wish to thank you for the opportunity to provide comment on the mortality information which the Health Care Finance Administration (HCFA) plans to release in December 1987.

Muhlenberg Hospital Center has a comprehensive, ongoing, hospital-wide Quality Assurance program to monitor and evaluate the quality and appropriateness of patient care services we provide. Mortality review is one aspect of this process.

The Board of Trustees, Administration and Medical Staff of Muhlenberg Hospital Center support the cost containment and quality of care efforts in progress in the State of Pennsylvania and throughout the United States. We are currently in the process of installing a patient severity indexing system and anticipate that this will result in more meaningful, verifiable data in the future.

With regard to this data release, I feel it is essential to note that critical clinical elements such as acuity or severity of illness are not reflected in this data. It is, therefore, impossible to draw meaningful conclusions or attempt comparisons between institutions based on mortality information alone.

Members of Muhlenberg Hospital Center's Medical Staff have, however, conducted an in-depth review of HCFA's mortality data which indicates the overall hospital mortality rates fall within the predicted range.

Schoenersville Rd. • Bethlehem, PA 18017 • 215-861-2200

It is noted that this institution exceeds the predicted mortality rate in only one diagnostic category, and it is questionable if nine cases is a statistically relevant sample.

Muhlenberg Hospital Center intends to continue comprehensive quality assurance and cost containment efforts. We would hope that HCFA will work with hospitals to provide the public with meaningful information on which to base their health care decisions.

Very truly yours,

William R. Mason
President

WRM:ts

Muncy Valley Hospital

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26648
Baltimore, Maryland 21207

RE: Comments on HCFA Mortality Data
Muncy Valley Hospital, Muncy, PA
Provider Number: 390078

Dear Dr. Roper:

Please find attached the comments our hospital wishes to be published in conjunction with the mortality data HCFA is planning to release in December.

These comments address the major problems encountered by our hospital while attempting to verify the data provided by HCFA, as well as our concern for the use of this data as a mechanism for measuring quality of care.

Please contact us if you feel that clarification is needed regarding any of the comments made.

Sincerely,

George J. Geib, C.P.A.
Chief Executive Officer
MUNCY VALLEY HOSPITAL

GJG:dm
MORTLTY

cc: Hospital Association of Pennsylvania

Tel. 717/546-8282
215 East Water Street, Muncy, Pennsylvania 17756

COMMENTS ON THE MORTALITY DATA
Muncy Valley Hospital, Muncy, PA
Provider Number: 390078

The HCFA Morality Rates for Muncy Valley Hospital were calculated based on 567 Medicare cases. Our own records indicate that 884 Medicare patients were actually hospitalized during 1986. Presumably, this discrepancy reflects the fact that HCFA did NOT include multiple admissions of individual beneficiaries which occurred during 1986, nor did it include any patients who were admitted to our hospital and subsequently transferred to another hospital for further care. Because of the methodology used by HCFA, hospitals have no way of verifying whether the number of Medicare cases being reported by HCFA is correct.

There was also a discrepancy found between the number of deaths indicated on HCFA's data versus the number of deaths reflected by our hospital's records. Also of significance is the fact that HCFA included post-hospital deaths in these statistics as well. Of the 57 deaths used in HCFA's calculations, 9 (16%) died after discharge from Muncy Valley Hospital. It should be noted, however, that hospitals have no way of verifying the number of deaths occurring after discharge or the relevance of the deaths to the identified admission.

The individual medical records for each reported death were reviewed in an effort to verify the diagnostic categories our patients were assigned to. Of major concern to us was the fact that principal diagnosis (that reason, after study, found to be chiefly responsible for admission) was used by HCFA to group patients for mortality purposes rather than the actual cause of death. This discrepancy is a significant one and must be kept in mind when looking at the mortality rates provided by diagnostic

category. It should also be noted that erroneous HCFA principal diagnosis data, as was well as limitations of comorbid conditions, was found during our verification of the HCFA data. This type of erroneous data also affects the mortality rates provided by diagnostic category.

Another significant variable which is not taken into account by HCFA's mortality data is patient wishes with respect to no use of extraordinary efforts. A large percentage of our patients are over 80 years of age and in the terminal stage of their illness. In such cases, death was the expected outcome at the time the patient was admitted to the hospital and should not be considered as "poor quality" care on the part of the hospital.

It is important to emphasize that consumers should not draw any conclusions from the mortality rates regarding the quality of care provided by hospitals. Mortality data in and of itself cannot be used to determine quality of care. This can only be accomplished through an in-depth review of the patient's medical record.

It must also be stressed that the "Actual Mortality Rate" published by HCFA is only meaningful when compared against the "Range of Predicted Mortality Rates" for the specific hospital. This data was not designed for direct comparison between facilities. As previously illustrated, there are many variables at each facility which must be considered in order to properly interpret each facility's mortality data and should not be used as an indication of the quality of care rendered at each facility.

GJG:dm
MORTLY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC WELFARE

NANTICOKE STATE GENERAL HOSPITAL
Nanticoke, Pennsylvania 18634

TELEPHONE
AREA CODE 717, 735-5000

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

RE: Response to HCFA Mortality Data
Medicare Provider Number: 390186

Dear Doctor Roper:

In responding to the Mortality Data which HCFA intends to publicize in December, 1987, the following review and analysis is presented. The actual mortality rate from all causes at Nanticoke State General Hospital was 13% compared to the range of predicted mortality rate of 8-16%. Of the 14 diagnostic categories reported to this hospital, we experienced no mortality (0%) for gastrointestial catastrophes, gynecological disease entities, orthopedic disorders and sepsis. We exceeded the range of predicted mortality rates in one category. For severe acute heart disease our actual mortality rate was 62% (predicted range was 20-56%).

Any discussion of our mortality rates must begin with a reference to two considerations in the statistical analysis of this study. First, our total numbers overall and, in this particular category, were low. A total of 26 cases were reported in the category, severe acute heart disease, of which 15 died. Since our numbers were low, the valid application of the statistics is less reliable increasing the impact of random variation of outcomes. Second, and more importantly, the study does not account for the severity of illness upon admission. Our internal review identified instances where severity of illness parameters were high in 46% of these cases. All charts in this diagnostic category were reviewed by the hospital's Medical Staff Executive Committee and evaluated against the Keystone Peer Review Organization quality review criteria for acute myocardial infarction. In all cases, the medical management of these patients met the criteria. In addition, the review process did not identify any quality of care concerns.

Fifteen deaths were attributed to the category severe acute heart disease. All were admitted to Nanticoke State General Hospital and expired here. There were no mortalities within 30 days of discharge from our facility.

Five patients or 33% were admitted to our Emergency Room with CPR in progress. One patient suffered a cardiac arrest just after admission to the E.R. and one patient had been resuscitated by paramedics after having suffered a cardiac arrest at home. A total of 7 patients, or 46% of the deaths in this category, had documented evidence of a high severity of illness upon admission to Nanticoke State General Hospital. In addition, two patients or 14% had family requests for no resuscitation and 86% had a history of arteriosclerotic cardiovascular disease and/or hypertensive cardiovascular disease.

In concluding our analysis of this data, we would caution against any attempt to equate a higher than predicted mortality rate with the provision of poor quality care. Any interpretation of this data should take into account the relative health status of a patient prior to admission (severity of illness) and the total numbers within each statistical category.

Sincerely,

Thomas J. Graham
Administrator

TJG/msl

cc: Jyoti Desai, M.D.
Ellen Murray, R.N.
Kelly M. Grotzinger, HAP

THE NASON HOSPITAL ASSOCIATION
NASON DRIVE
ROARING SPRING, PENNA. 16673
TELEPHONE (814) 224-2141

HCFA# 390062
Roaring Spring, PA
October 20, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sirs:

This is in reply to your request for comment on the 1986 mortality statistics as released to Nason Hospital in September 1987.

Data Verification

HCFA cases reported for Nason Hospital for 1986 - 724 cases

Nason Hospital statistics report for Medicare admissions in 1986 - 1180 admissions.

The data used by HCFA indicates that a total of 99 Medicare patients admitted to Nason Hospital died within 30 days of admission. Of these, 80 died while still a patient of the hospital, while 19 died after discharge. Our own records indicate that 81 patients died in Nason Hospital within 30 days of admission, while 18 died after discharge.

This discrepancy is an error in the date of death for one patient who died in the hospital rather than after discharge. (See attached sheet for correction information).

We attempted to verify the data presented by HCFA but found it difficult to identify specific cases from the identifiers given by HFCA. E.G., only last names or partial last names. All patients who were reported by HCFA as having died in the hospital actually did so.

Interpretive remarks

The actual mortality rate calculated for Nason Hospital by HCFA is within the range of predicted mortality rates calculated by HCFA for Nason Hospital.

The actual mortality rate for each of the diagnostic categories as calculated by HCFA for Nason Hospital is within the range of predicted mortality rates as calculated by HCFA for Nason Hospital.

There were no diagnostic categories in which a large percentage of deaths occurred after discharge, according to our review.

We respectfully suggest that mortality statistics alone should not be used as an indicator for quality of care since the HCFA model for expected mortality rate development does not reflect the severity of illness of the hospital's

patients.

The data released by HCFA can be used by hospitals to identify or suggest areas for review in the hospital's ongoing quality assurance program which does include mortality review.

Respectfully,

John P. Kinney
President

JPK/lt

Enclosure

Nason Hospital HCFA# 390962

Correction of HCFA data

Patient ID [redacted]

Diagnostic Category HS

Age 69

Sex F

Date of admission 12/09/86

Date of discharge 12/10/86

*Date of Death 12/10/86 - correct date of death

Principal Diagnosis 4105

Principal Procedure 3772

*HCFA reported date of death as 12/31/86 - incorrect

This case was an in-hospital death instead of after discharge death as reported by HCFA.

NAZARETH HOSPITAL

2601 HOLME AVENUE • PHILADELPHIA, PA. 19152
335-6000

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Baltimore, Maryland 21207

Dear Doctor Roper:

Enclosed, please find comments based on a review of statistical data supplied to us in your September 21, 1987 submission of mortality data.

We hope this information sheds some meaningful light on an interpretation of our statistics.

Sincerely yours,

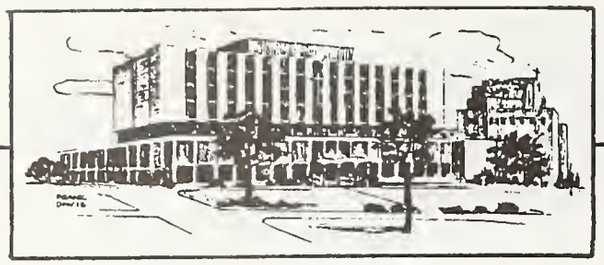
Sister M. Therese

Sister M. Therese
President

Carl J. Hoffman M.D.

Carl J. Hoffman, M.D.
Director of Medical Affairs

SMT/do
Enclosure



NAZARETH HOSPITAL

2601 HOLME AVENUE • PHILADELPHIA, PA. 19152
335-6000

On initial review, we note that all categories fall within the predicted statistical range. To the extent possible, we have attempted to verify the accuracy of these data. One patient was determined not to have been our patient and in one case, we could not determine the date of death. There were errors in the date of death as reported in 9 cases. Twenty-five percent of these patients were over 85 years of age.

We reviewed those cases in which our experience fell in the higher ranges but within the predicted span. We chose to look carefully at those categories in which the hospital experience was more than twice the minimal expected in that range. The following tabulation reflects our evaluation of these cases.

# Cases	Category	Average Age	Predicted Range	Nazareth	Unexpected Deaths
91	Cancer	75	(22%-38%)	38%	None
17	Metabolic/ Electrolyte	83	(10%-32%)	24%	None
7	Renal Disease	82	(12%-53%)	29%	3
10	Severe Trauma	87	(03%-16%)	10%	1

Unexpected deaths in these categories were deaths from any cause that could not reasonably be forseen as a consequence of the disease.

Review of these categories resulted in the following observations.

The Cancer category reflects the fact that this hospital operates an Oncology Unit with Chemo and Radio Therapy to which patients are referred and to which they return with disease complications and sequele. This unit serves the entire northeast section of the city receiving patients from at least seven hospitals and is part of the Northeast Cancer Consortium. The treatments in many cases are palliative.

Cases reviewed in the Metabolic/Electrolyte and Renal categories reflect a high percentage of patients referred from nursing home environments with chronic illness and debility. In these categories, there is a high incidence of multiple organ system failures. The cause of death is not necessarily the direct result of the admitting diagnosis but related to complicating diseases. In the Metabolic and Electrolyte cases, there is a cluster of dehydration and chronic renal failure cases transferred from nursing homes.

In the Pulmonary Disease category, a large number of chronic pulmonary disease and respiratory failure patients were elderly patients with multiple co-morbidities.

The severe Trauma categories revealed that the average age was 87 years and that most were elderly patients with significant large bone fractures from falls.

Review of the Cardiovascular categories reflect a high number of complicating diseases and no code status.

Corrections of HICFA Report - Hospital #390204

Patient ID Number (HIC)	Surname	Diagnostic Category	Age	Sex	Date of Admission	Date of Discharge	Date of Death	Principle Diagnosis	Principal Procedure
[redacted]		CA	82	M	07/14/86	07/30/86	07/30/86	1977	
[redacted]		GI	80	F	05/17/86	05/17/86	05/17/86	55200	9960
[redacted]		HM	81	F	09/11/86	09/20/86	09/20/86	4254	
[redacted]		HS	67	M	09/15/86	09/15/86	09/15/86	4101	
[redacted]		PN	81	F	11/05/86	11/18/86	11/18/86	496	9960
[redacted]		PN	66	F	12/15/86	01/31/87	01/31/87	486	
[redacted]		UN	74	M	03/07/86	03/23/86	03/23/86	2639	432
[redacted]		UN	82	F	11/16/86	11/24/86	11/24/86	8730	
[redacted]		UN	80	F	03/12/86	04/01/86	Unknown	6826	

PA 160.3

* Patient not located in Hospital Register

[redacted]		SE	92	F	05/03/86	05/05/86	05/05/86	0389	

NMH Nesbitt Memorial Hospital
EST. 1912

October 19, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
P.O. Box 26684
Baltimore, Maryland 21207

MEDICARE PROVIDER #39-0137

Dear Dr. Roper:

Nesbitt Memorial Hospital has reviewed in detail the HCFA mortality figures and found them to be accurate in regard to admission dates, discharge dates, and deaths occurring in the Hospital. Included in the HCFA report are 45 deaths which occurred outside the Hospital within 30 days of discharge. The Hospital has not verified that figure and strongly feels these numbers should not be included in Hospital mortality statistics.

The Hospital also feels strongly that presenting these figures for public comparison will be at best confusing, if not misleading. Comparisons among hospitals based on these gross statistics will not help the public to make informed decisions. If these statistics must be published, the public deserves more detailed information such as diagnosis among categories, comorbidities, population ages, etc., to develop fully informed decisions.

If you have any questions, or require additional information, please do not hesitate to contact me.

Sincerely,

John D. Francis

John D. Francis, FACHE
Administrator

JDF:ml

562 Wyoming Avenue • Kingston, PA 18704 • (717) 288-1411

HCFA MORTALITY

Nesbitt Memorial Hospital has reviewed in detail the HCFA mortality figures and found them to be accurate in regard to admission dates, discharge dates and deaths occurring in the Hospital. Included in the HCFA report are 45 deaths which occurred outside the hospital within 30 days of discharge. The Hospital has not verified that figure and strongly feels these numbers should not be included in Hospital mortality statistics.

Of the 16 categories enumerated in the report, Nesbitt Memorial Hospital's actual mortality rate was 0 in two categories, those being opthalmological and gynecological diseases. Two categories, gastrointestinal catastrophies and severe trauma, fell below the range of predicted mortality rates. In nine diagnostic categories, the actual mortality rate at Nesbitt Memorial Hospital was lower than the midpoint of the predicted rate. In three of those nine categories (cancer, urologic diseases, and orthopedic disorders), we fell within the bottom one/third of the predicted range. In all, Nesbitt Memorial Hospital's actual mortality rate was well within the expected range for each of the 16 categories and for "all causes".

Three categories warrant further discussion:

1) Renal Disease - based on 13 cases, the NMH rate was 38%, with the range being 7 - 56%. We feel that since NMH had only 13 Medicare discharges in this categories out of a total 2,224 total Medicare patients, the number is statistically insignificant (invalid) due to sample size. Although the value falls within the predicted range, the limited number of cases treated makes the percentage appear inflated. Viewed from a different perspective, .2% of all Medicare discharges resulted in death due to renal disease.

2) Severe Chronic Heart Disease - During the calendar year 1986, there were 44 deaths due to this cause. Of these deaths, eight occurred after discharge from the hospital, and almost half occurred in patients over 80 years old. Six of the deaths occurred to patients whose families and physicians had written "Do Not Resuscitate" orders. Even though the actual mortality rate was 25%. All deaths occurring in the hospital were either "expected" or not preventable due to complicating comorbidities.

3) Severe Acute Heart Disease -- Of the 35 deaths included in this category, a full 21 (close to two-thirds) expired within 24 hours of admission. This figure includes three patients presenting to the Emergency Room with ruptured aortic aneurysms. The average age of these patients was 77 years old.

The Hospital feels strongly that presenting these figures for public comparison will be at best confusing, if not misleading. Comparisons between hospitals based on these gross statistics will not help in allowing the public to make informed decisions. If these statistics must be published, the public deserves more detailed information such as diagnosis among categories, comorbidities, population ages, etc. to develop fully informed decisions.

9100 BABCOCK BLVD.
PITTSBURGH, PA 15237-5842
412/367-6700

NORTH HILLS
PASSAVANT HOSPITAL

GEORGE R. SHIFLER
CHAIRMAN
ALEXANDER McALILEY
PRESIDENT

October 27, 1987

Mr. William L. Roper, Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Mr. Roper:

Re: Medicare Provider #39-0107

The Health Care Financing Administration Mortality Data has been reviewed by representatives of our Professional Staff, the Department of Quality Assurance, and Administration. We are gratified to find that our statistics are well within the predictable mortality as established by your agency. However, we are resolute in our belief that your statistical model is simply one indicator of potential quality distinctions among hospitals and physicians. As in the past, we find that your sample size is inconsistent with the conclusions the public may draw from the limited data. We will forward directly, under separate cover, three cases of specific concern.

It is important that we place in the record numerous facts that relate to our hospital and should be considered by you for the purpose of evaluating quality of care rather than analyzing statistics.

A. Twenty-four percent of the deaths attributed to our institution died elsewhere. It is not possible to evaluate quality without knowledge of cause of death.

B. NHPH is ringed with personal care homes, several large nursing homes and a county hospital for Medicare and Medicaid patients. A high number of very ill patients from those facilities are admitted to NHPH. These patients usually have more than one comorbid condition which contributes to their poor medical condition.

C. A sample of deaths revealed that 23% had requested that no aggressive measures be initiated.

D. Forty-one percent of the cases reviewed died within forty-eight hours of admission.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Statistically, our results are acceptable. However, we must urge you to improve your methodology to include consideration to assess the patient's severity and acuity of his illness.

We will continue to review the quality of care in our hospital using every means available, and not relying solely on statistical measures. The patient, as always, is our primary concern.

Sincerely,

President

AMcA:dcg

9100 BABCOCK BLVD.
PITTSBURGH, PA 15237-5842
412/367-6700

NORTH HILLS
PASSAVANT HOSPITAL

GEORGE R. SHIFLER
CHAIRMAN
ALEXANDER McALILEY
PRESIDENT

October 27, 1987

Mr. William L. Roper, Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Mr. Roper:

Re: Medicare Provider #39-0107

Attached are three pages of North Hills Passavant Hospital's mortality listing that contain reporting inconsistencies.

	HIC #	Surname	Adm. Date	Disch. Date	Date of Death
1.	[redacted]		03/03/86	03/07/86	03/07/86
	This patient did not expire while an inpatient.				
2.	[redacted]		10/30/86	11/06/86	11/06/86
	This patient did not expire in the hospital.				
3.	[redacted]		12/01/86	12/22/86	12/31/86
	This patient did expire here on 12/22/86.				

All other information appears to be correct.

If you have questions or concerns, please call Helen Baret, Quality Assurance Coordinator, at (412) 367-6332.

Sincerely,

Alexander McAliley

President

AMcA:RJT:dcg

Enclosures

North Penn Hospital

100 Medical Campus Drive
Lansdale, PA 19446 • (215) 368-2100

Comments on H.C.F.A. 1986 Mortality Data

North Penn Hospital, Lansdale, PA

Provider #390012

The Health Care Financing Administration has announced its intention to publish mortality data, effective December, 1987, for Medicare Patients admitted to hospitals nationwide between January 1, 1986 and December 31, 1986. Specifically, this data includes the number of Medicare cases, the actual percentage of mortality and the range of predicted mortality rates for each of sixteen diagnostic categories. A seventeenth category encompassing a compilation of all diagnostic causes will also be included. Because of the technical complexity of this issue, we are concerned by this or any data release which attempts to characterize the intricacies of hospital quality of care with a single statistical comparison. While North Penn Hospital's actual mortality rates for each of the sixteen reported diagnostic categories are well within predicted ranges, any qualitative assessment of North Penn Hospital, or any other hospital, must consider many other important factors to have validity.

We believe North Penn Hospital has always provided a high quality care which is routinely monitored by the quality assurance programs of both the Joint Commission on the Accreditation of Hospitals and The Pennsylvania Department of Health.

This quality assurance process actively involves trustees, physicians, professional and management staff alike in the review of each patient's care both during and after treatment. Review of mortality information is only one aspect of our broader, routine quality assurance program.

Access to qualitative hospital data which is valid and useful to consumers is vitally important. However, if future information is to be meaningful it must be adjusted to take into consideration additional factors including measures of severity of illness.

Regardless of the future direction of informational releases which attempt to define quality of care, North Penn Hospital will continue to maintain its current high standard of patient care through active participation in internal quality assurance programs.

NORTHEASTERN HOSPITAL OF PHILADELPHIA
2301 East Allegheny Avenue, Philadelphia, Pennsylvania 19134-4499, (215) 291-3000

October 27, 1987

Mr. Harvey Brook
Health Standards & Quality Bureau
Room 2-D-2
Meadows East Building
6300 Security Boulevard
Baltimore, Maryland 21207

Dear Mr. Brook:

Mortality review has for many years been a recognized means of evaluating quality of patient care. Case discussions bring to light areas of possible improvement while simultaneously serving as an educational mechanism for members of the Medical Staff. Mortality review is actively pursued at Northeastern Hospital of Philadelphia and is one of the most gratifying activities regularly undertaken to elevate standards of care and assure quality of professional performance.

The Northeastern Hospital of Philadelphia realizes that its patients have a legitimate concern in securing useful, reliable data on the quality of care that is available to them. Mortality is only one of a number of outcomes or clinical indicators used in evaluating quality of care, none of which provides a direct measure of quality. Use of the statistical data released by HCFA has limitations imposed by the assumption that each hospital's patients are "average" except with respect to certain characteristics included in the statistical model from which each hospital's range of predicted mortality rates is derived.

Our perception of the typical patient seeking care at Northeastern Hospital of Philadelphia is of an elderly individual with a complex history of multiple diseases which interrelate and serve to complicate the diagnosis and treatment of the patient's medical condition. Many of these ailments tend to be chronic in nature so that, although much improvement can take place, the patient is likely to experience future setbacks which will require readmission to the hospital. We find that patients in our geographic area

tend to be stoic and often do not seek medical attention until very late in the course of their disease, which makes effective therapy more difficult to achieve.

The characteristics which the HCFA model recognizes as influencing mortality rates in addition to the principal diagnosis, are the presence of certain complicating illnesses, the patient's age and sex, the number of times the patient was admitted to the hospital in the preceding 12 months, and whether the patient was transferred from another hospital. Thus, factors which in our view would most affect the outcome of hospital care have been taken into account. Regrettably, the model does not include measures of severity of illness at the time of admission. Work is underway on the national level to develop such measures which, along with the other refinements, are needed before solid conclusions can be drawn from the relationship of death rates to quality of care provided.

The Board of Directors, Medical Staff, and Administration of Northeastern Hospital of Philadelphia hold quality of care as our highest goal and constantly strive to identify problems and take corrective action where quality issues are concerned. As methods of measuring and evaluating quality are further refined, we look forward to employing them to enhance our efforts in providing community service.

Sincerely,

Robert J. Moylan

Robert J. Moylan
Chief Executive Officer

RJM:mc

Oil City Area
Health Center,
Inc.
Devoted to Caring

Writer's Direct Dial Number
814/677 - 1705

October 23, 1987

William L. Roper, M. D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Enclosed please find Oil City Area Health Center's comments regarding the recent mortality data study. Our Medical Records personnel have done an indepth review of each chart involved and we believe the summary attached addresses our concerns in specific areas.

Thank you for the opportunity to write you.

Sincerely,

Neil E. Todhunter
President

/dms
Encl.

MORTALITY REVIEW OF HCFA REPORTED DEATHS FOR 1986

Review of the recent mortality rates released by HCFA for the Oil City Area Health Center reveal in a number of cases, death was the expected outcome at the time the patient was admitted or discharged. For example, the patient was admitted to the health center and it was the patient or their family who requested that no extra-ordinary efforts be undertaken.

The data used by HCFA indicate that a total of 122 of the 1088 Medicare patients admitted to the Oil City Area Health Center died within 30 days of admission. Of these, 89 died while still a patient of the health center, while 33 died after discharge. Our own records indicate that 1,900 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of an individual beneficiary to the health center. It is impossible to determine the percentage of the 33 patients dying after discharge who were in fact alive upon discharge, as information concerning death after discharge is not included in a patient's medical record.

In none of the diagnostic categories, does the Oil City Area Health Center's actual mortality rate fall outside of the range of the predicted mortality rate.

As reflected in the attached analysis, numerous patients who died had unusually large number of complicating and/or comorbid conditions, that fact not being considered by HCFA in preparing the analysis. The analysis by diagnostic category reflects the number of deaths in-hospital and post-hospital with the figure at the right reflecting the number of those who had comorbid and/or complicating conditions. Eighty-three of the 89 in-hospital deaths, for a rate of 93%, had complications and/or comorbid conditions. Twenty of the 33 post-hospital reported deaths, for a total of 67%, had comorbid and/or complicating conditions during their prior hospitalizations.

Of the 33 post-hospital reported deaths, 19 patients had been discharged from the health center to nursing homes.

It was impossible to analyze most of the mortalities after discharge, which the government agency collected through Social Security statistics. It should be noted that instead of attributing the cause of death as that listed on the death certificate, the diagnostic category the patient is listed under is that of his admission to the hospital where he was last a patient.

After investigation, it was found that one patient who was listed under the low risk category of EY (Opthalmologic Disease) and expiring after discharge, did indeed undergo cataract extraction with insertion of an IOL on 4-21-86. Patient subsequently discharged without complications on 4-22-86. Unfortunately, on 4-28-86 while sitting on the porch of her home in Franklin, Pa., a semi-tractor trailer went out of control while descending a hill and ran through the porch, critically injuring the former patient. Death occurred the following day in another hospital, yet we were credited with the death listed under the category of EY (Ophthalmologic Disease) and a 50% rate, which should have been 0%. This is one type of problem we have had identifying the actual cause of death when the patient expired outside of the hospital.

Also, under the low risk category of GY (Gynecologic Disease) is a 92-year-old patient admitted to the health center from a nursing home in an extreme cachetic state, suffering from severe vaginal hemorrhages. When admitted, the patient was practically moribund, not eating, very weak, mentally unresponsive and confused. The patient while in the hospital was treated by a gynecologist conservatively and it was felt due to her extreme condition, she was unable to withstand any surgery. Therefore, she was stabilized and then transferred back to the nursing home where she expired 8 days later.

Also, a death which occured outside the hospital in the GI category was an 84-year-old patient who was admitted to the health center on 11-25-86 with exacerbation of his duodenal ulcer disease suffering with upper G.I. bleeding. The patient underwent numerous studies and since his blood loss was not significant, he was treated and discharged in stable condition on 12-4-86 with ulcer prophylaxis. The patient, eleven days following discharge, returned to the ER in cardiac arrest with unsuccessful CPR with a massive myocardial infarction (unrelated to the patient's hospital stay of the G.I. origin).

Also, please find attached a percentage of age groups in which deaths occurred. In the study were a group of Medicare patients from age 0-64. The reasons for those patients being on Medicare under the age of 65 years, was the fact that they had a terminal illness, a disability and 6 of these patients were from the State Mental Institution.

HCFA admitted in its Federal Register notice that "the model remains simply one indicator of potential quality distinctions among Hospitals." That notice also conceded that "the smaller the number of admissions, the less reliable are the statistics, as the impact of random variation of outcomes in individual cases is greater."

ANALYSIS OF REPORTED DEATHS (OIL CITY AREA HEALTH CENTER)

Diagnostic Category	Deaths Reported by HCFA In-hospital # I-H	(Comp/ Comorb)	Post-hospital # P-H	(Comp/ Comorb)
CA (Cancer)	16	(16)	8	(5)
CE (Cerebrovascular Accidents)	6	(4)	4	(2)
GC (Gastrointestinal Catastrophes)	9	(9)	0	(0)
GI (Gastrointestinal Disease)	5	(5)	1	(1)
GU (Urologic Disease)	1	(1)	0	(0)
GY (Gynecologic Disease)	0	(0)	1	(1)
HL (Low Risk Heart Disease)	0	(0)	0	(0)
HM (Severe Chronic Heart Disease)	8	(8)	3	(3)
HS (Severe Acute Heart Disease)	14	(13)	1	(1)
ME (Metabolic/Electrolyte Disturbances)	2	(1)	2	(1)
OP (Orthopedic Disorders)	0	(0)	0	(0)
PN (Pulmonary Disease)	8	(8)	4	(3)
RN (Renal Disease)	3	(3)	0	(0)
SE (Sepsis)	5	(4)	2	(2)
TR (Trauma)	1	(0)	2	(0)
OP (Ophthalmalogic Disease)	0	(0)	1	(1)
UN (Other Diagnoses)	11	(11)	4	(2)
TOTAL	89	(83)	33	(22)
PERCENTAGE	73%	93%	27%	67%

NOTE: All In-hospital deaths verified

AGE GROUPS:

0-64.....16 (13%)

65-69.....15 (12%)

70-74.....15 (12%)

75-79.....25 (21%)

80-89.....45 (37%)

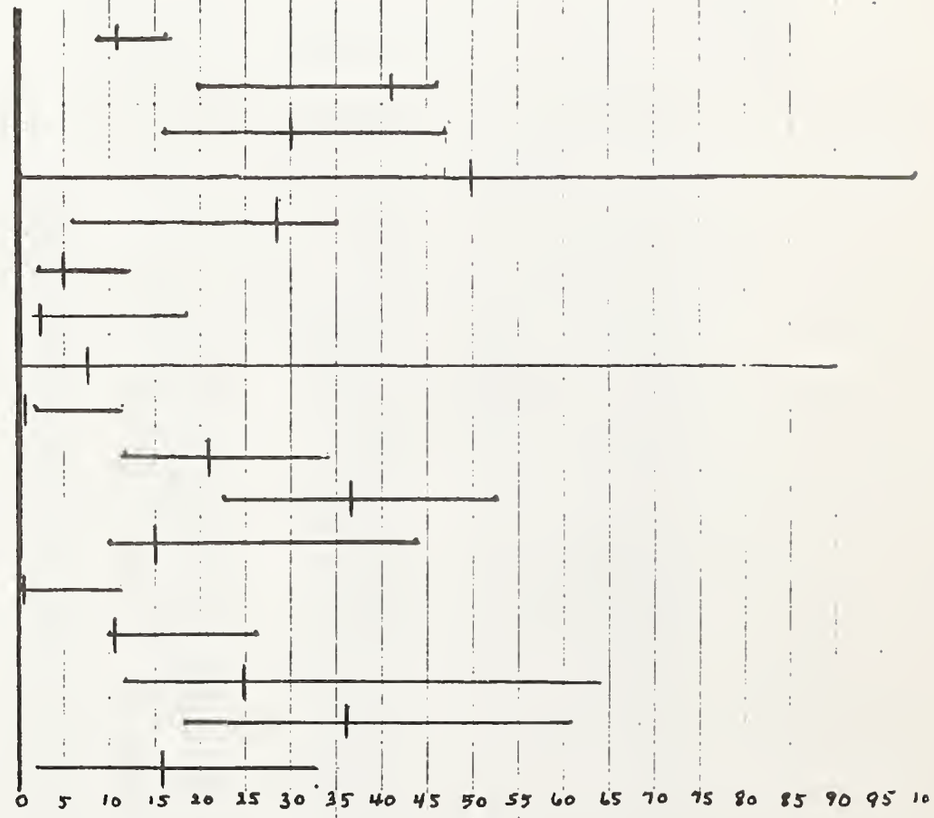
90-100.....6 (5%)

PA 166.3

OIL CITY AREA HEALTH CENTER

MEDICARE MORTALITY RATE

All Cases
Ca - CANCER
Ce - CEREBROVASCULAR ACCIDENTS
EY - OPHTHALMOLOGIC DISEASE
GC - GASTROINTESTINAL CATASTROPHES
GI - GASTROINTESTINAL DISEASE
GU - UROLOGIC DISEASE
GY - GYNECOLOGIC DISEASE
HL - LOW-RISK HEART DISEASE
HM - SEVERE CHRONIC HEART DISEASE
HS - SEVERE ACUTE HEART DISEASE
ME - METABOLIC/ELECTROLYTE DISTURBANCES
OP - ORTHOPEDIC DISORDERS
PN - PULMONARY DISEASE
RN - RENAL DISEASE
SE - SEPSIS
TR - TRAUMA (SEVERE)



OCAHC (RED)
RANGE OF PREDICTED MORTALITY RATES (BLACK)

THE PALMERTON HOSPITAL

135 Lafayette Avenue · Palmerton, Pennsylvania 18071
(215) 826-3141

October 15, 1987

Health Care Financing Administration
Health Standards and Quality Review
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Provider # 390019

Dear Sir:

We have reviewed the HCFA Planned Mortality Data Release and wish to submit the following comments.

The Mortality Rates for the Renal Disease (RN) and Sepsis (SE) categories are not statistically valid, in light of the fact that The Palmerton Hospital had only two patients in the Rental Disease (RN) Classification and five in the Sepsis (SE) Classification. Therefore, the actual Mortality Rates as stated in the publication for these classes are definitely biased.

The Cebrovascular Accident (CE) Category Mortality Rate is on the high side of the Range of Predicted Mortality Rates. However; four of the patients who are included in this category were above the age of 80 years, and had additional complications which must also be taken into account when reviewing these statistics.

Overall, the hospital's performance is quite good when compared with the Range of Predicted Mortality Rates. In thirteen of the sixteen categories reported, the hospital's Mortality Rate is well below the Mean of the Range of Predicted Mortality Rates. The three exceptions are those as explained above.

Sincerely,

Barbara Spadt

Barbara Spadt,
Administrator

BS:ls

Paoli
Memorial
Hospital

October 27, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Provider Number: 390153

Dear Mr. Roper:

The accuracy of HCFA's mortality data for calendar year 1986 has been confirmed by our review of hospital records. Paoli Memorial Hospital's mortality rate fell within the predicted range in all 16 categories rated by HCFA.

Two of the categories were on the high side of the predicted range, but still within the range. It should be noted that in those two categories, 43.7% of the patients who died were 81 years of age or older.

Our reason for submitting this letter is to address our concern that the information released to the media will include clear statements regarding data limitations, and give the public a clear understanding of what the data does and does not represent. It is important to understand that quality of care cannot be determined by mortality statistics alone.

Sincerely,

Leland I. White
President

LIW:eb

Lancaster Avenue
Paoli, PA 19301
(215) 648-1000

POCONO HOSPITAL

CERTIFIED MAIL

October 16, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

RE: 1986 HCFA MORTALITY STATISTICS
POCONO HOSPITAL, EAST STROUDSBURG, PA
MEDICARE PROVIDER # 390201

Dear Dr. Roper:

We are responding to the 1986 mortality statistics compiled by the Health Care Financing Administration that were recently forwarded to Pocono Hospital for review. We have evaluated the statistics to the best of our ability and have been unable to find any inaccuracies. We were, however, unable to review the patients who died after leaving the hospital.

In reviewing our mortality rates in the sixteen categories, Pocono Hospital's statistics fell within or below the range of predicted mortality in all categories. In two of the sixteen categories (urologic disease and sepsis), although we fall within the normal range of predicted mortality, we are in the upper part of that range. In the following two paragraphs we will attempt to explain these latter two figures:

> There were eight deaths in the sepsis group. Their average age was 76.25 years. All of these eight deaths had Do Not Resuscitate (DNR) orders, and all had two or more co-morbid conditions, indicating that other serious diseases were present.
>
> In the urologic group, there were twelve deaths. Their average age was 84.5 years. Ten of these twelve deaths had Do Not Resuscitate (DNR) orders,

RE: 1986 HCFA MORTALITY STATISTICS
POCONO HOSPITAL, EAST STROUDSBURG, PA
MEDICARE PROVIDER # 390201

and six had two or more co-morbid conditions, indicating that other serious diseases were present. Six of the twelve patients in this group expired after being discharged from the hospital. Five of those six were discharged to skilled nursing facilities.

Thank you for your consideration of our explanation of these statistics.

Sincerely,

Sherwood L. Samet, M.D.
Medical Director

SLS:cf

Pottstown
Memorial
Medical
Center

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

RE: Comments on the HCFA Mortality Data/Pottstown Memorial Medical Center, Pottstown, Pennsylvania

Dear Dr. Roper:

This is to comment on the data that we are to verify and send to you by October 28, 1987.

Data Verification

The data used by HCFA indicates that a total of 3604 Medicare patients admitted to the Pottstown Memorial Medical Center died within 30 days of admission. Of these, 248 died while still a patient of the hospital, while 23 died after discharge. Our own records indicate that 4,030 (12/1/85 - 1/31/87) Medicare admissions occurred in 1986. We have no way of verifying whether the number of Medicare patients treated at the Pottstown Memorial Medical Center is correct. Our own records also indicate that of the 238 Medicare patients who died within 30 days of admission while still an inpatient, 55 were still alive at the time of discharge. It is impossible to determine the percentage of the 55 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

1600 East High Street, Pottstown, Pennsylvania 19464 · (215) 327-7000

Intrepretive Remarks

In 2 of the diagnostic categories, the Pottstown Memorial Medical Center's actual mortality rate falls outside of the range of the predicted mortality rate. After correcting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to 1. Several factors may account for this difference.

All causes of actual mortality (14% - predicted mortality 8 - 15%) is above the mean because of severity of disease on admission; with older age population and referral from Extended Care Facilities. (Manatawny Manor, Leader Nursing Home, Frederick Mennonite Home, Montgomery County Geriatric and Rehabilitation Center, Coventry Manor and Douglassville Manor)

The average age of people dying at Pottstown Memorial Medical Center was 81 years.

High Risk Cancer; (actual mortality 38%, predicted mortality 17% to 34%) considering patients sent home from specialty hospitals when they have nothing further to offer the patient as well as our own Oncology Service; combined when the patients are, subsequently, admitted here for terminal care, thereby, exceeding the predicted range. Forty-four of fifty-one patients (86%) were no codes on admission and 50% were admitted with metastatic disease suggesting the cancer is at its end stage. Thirty percent were in the hospital less than 48 hours.

High Risk Pulmonary disease had a mortality of 26%, predicted mortality of 13% - 28%. Thirty percent of these patients had problems other than pulmonary disease which contributed to their death, such as cardiac failure or myocardial infarction. Seventeen percent had three or more admissions in 1986.

High Risk Cerebrovascular Accidents with a mortality of 34% - predicted mortality 19% to 38%, were all acute admissions with severe disease and multiple concomitant problems. All efforts expended to improve outcome; in instances where indicated, neurosurgical intravention was involved. Most patients were unresponsive on admission from the Emergency Department.

Severe Chronic Heart Disease, actual mortality 36%, predicted mortality 17% to 34%; 77% were no heroic measures as by prior personal wish or family indication on admission.

Severe Acute Heart Disease, actual mortality 43%, predicted mortality 26% to 52%, 56% died within 24 hours, 60% died with Cardiogenic Shock and 88% were admitted acutely ill through the Emergency Department.

Should you have any further questions, please feel free to get in touch with me.

With kindest regards.

Sincerely yours,

Anthony R. Brasacchio

Anthony R. Brasacchio
Senior Vice President

ab

attachment

cc: Martin Ciccocioppo

POTTSTOWN MEMORIAL MEDICAL CENTER

DIAGNOSTIC CATEGORY	DEATHS REPORTED BY HCFA IN-HOSPITAL	DEATHS REPORTED BY HCFA POST-HOSPITAL	DEATHS VERIFIED BY PMMC IN-HOSPITAL	DEATHS VERIFIED BY PMMC POST-HOSPITAL
CA -- Cancer	53	14	51	6
CE -- Cerebrovascular Accidents	28	2	27	0
GC -- Gastrointestinal Catastrophes	6	2	6	0
GI -- Gastrointestinal Disease	17	0	15	0
GU -- Urologic Disease	1	1	1	0
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	6	3	6	0
HM -- Severe Chronic Heart Disease	35	4	35	0
HS -- Severe Acute Heart Disease	25	0	25	0
ME -- Metabolic/Electrolyte Disturbances	3	2	3	0
OP -- Orthopedic Disorders	4	1	4	0
PN -- Pulmonary Disease	27	14	27	3
RN -- Renal Disease	4	0	4	0
SE -- Sepsis	3	0	3	0
TR -- Severe Trauma	4	1	2	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	32	11	29	0
Total -- All Categories	248	55	238	9

PRESBYTERIAN-UNIVERSITY OF PENNSYLVANIA MEDICAL CENTER
39th and Market Streets, Philadelphia, Pennsylvania 19104 • 215 662-9103

I. Donald Snook, Jr., President

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Dear Sirs:

Your policy of sharing health care information with the public is to be commended. It is a step in helping consumers make educated decisions about their own health and well-being.

We think that more needs to be done to educate the public. Mortality data alone is not a reasonable indicator of the overall quality of hospital care.

Consider the very thorough evaluations done by the Joint Commission on Accreditation of Healthcare Organizations. Every three years, this independent group of health care experts sends survey teams to 5,000 of the nation's 6,000 hospitals at the hospital's invitation. In addition to studying mortality data and other statistics, they spend three days visiting every relevant department in the hospital, from nursing to food service and meeting with board members, management and physicians.

The team's report is evaluated by the Joint Commission which votes for or against "accreditation." This is a standard of quality that the government and private insurers believe in so strongly that they will not reimburse hospitals that are not acccredited.

HCFA itself admits the greatest flaw in the data it releases is that it cannot take into consideration the severity of illnesses treated by a hospital. This is a serious drawback for Presbyterian and other tertiary care centers, hosptials that by definition treat patients that are sicker than the average. For our patients, releasing this data without a severity index is misleading not educational.

HCFA does not need to duplicate the efforts of the Joint Commission. The health care industry already has a vigilant watchdog. We suggest that you work with the health care industry to develop programs that will make available accurate, dependable information.

Hospitals have everything to lose and nothing to gain by keeping patients ignorant. Those of us who are doing a good job — and that's the overwhelming majority of hospitals — having nothing to fear from a close but accurate scrutiny.

HCFA is to be congratulated for making an effort to educate consumers. Now it's time to take the next step.

Sincerely,

L. Donald Snook, Jr.
President

MEDICARE PROVIDER NUMBER: 390164

The following are the brief comments of Presbyterian-University Hospital ("Presbyterian") of Pittsburgh, Pennsylvania concerning the mortality rates prepared by HCFA. As a 568-bed tertiary acute care university hospital, Presbyterian serves as a national and regional referral center and as the primary teaching facility for the University of Pittsburgh School of Medicine. Presbyterian, while reassured by its own low mortality rates, believes that these numbers do not represent the sole or most important measure of the quality of care provided by its medical and hospital staff. Because of the sophisticated services that are provided by the university hospital, and the corresponding referral of gravely ill patients, studying mortality rates by looking only at numbers is misleading. Therefore, reviewing mortality statistics is one small protion of the hospital's ongoing mission to constantly measure the quality of care provided and seek to enhance it.

METHODOLOGY CONCERNS

Although much of the framework for the methodology was not published, there are manifest flaws within it which were discovered when Presbyterian staff began to verify the data. The HCFA system relied upon the primary diagnosis from the medical record in predicting the range of expected mortality and in calculating each hospital's mortality rates. Typically, a physician is taught to identify the specific underlying cause of the disease initially before identifying the manifestation of the disease. By definition, the sixteen diagnostic categories in the model represent neither the cause of death for patients who died, nor the underlying disease or the condition bearing the greatest risk to the patient. Therefore, it appears that the statistical model for estimating expected mortality rates could be enhanced by assuring consistency between the principles of clinical diagnosis and the model's use of the primary diagnosis from the medical record.

For example, consider the situation where a patient is admitted for coronary artery bypass surgery or aortic valve replacement due to congestive heart failure. The primary diagnosis, the valve disorder, caused the congestive heart failure which, in turn, necessitated the operation. This diagnosis would cause the patient to be classified in the "low risk heart disease" category. However, the underlying disease which results in the operation is frequently congestive heart failure, which is included in the high risk heart disease category. In addition, HCFA apparently treats only rheumatic heart disease as "high risk". Rheumatic heart disease is becoming or has increasingly become an uncommon cause of valvular heart disease. Thus congestive heart failure as a manifestation of valvular disease is today, unlikely to be of rheumatic origin. Pursuant to this methodology, it can be expected that the mortality rates of patients with low risk heart disease would be artificially high and that the severe and acute heart disease mortality rates would be lower than the predicted range. As will be explained in detail, the numbers at Presbyterian calculated by HCFA reflect this methodological flaw.

Further refinement of the impact of comorbidity on risk of death in the model is necessary in order to increase the validity and usefulness of the mortality rates. Although the model incorporates single comorbid conditions, it is not

clear how they are factored into the model or how multiple comorbid conditions are considered. Patients with multiple comorbid underlying diseases or conditions are likely to be concentrated in teaching hospitals such as Presbyterian, yet the model does not adequately address these factors. Researchers and medical professional societies should be given the opportunity to carefully study how comorbidity is documented in the medical record and how these conditions can be factored in the model. Data which includes these comorbid factors would result in more meaningful data for quality assurance purposes within the hospitals, for PROs and for consumers.

DATA VERIFICATION AND REVISED NUMBERS FOR HEART CATEGORIES

To begin to use the mortality data in the hospital's quality assurance program physicians were first asked to look at those cases in the categories of low-risk heart disease, severe chronic heart disease and severe acute heart disease. Pursuant to the methodology coding problems discussed above, this review resulted in quite different numbers. In the low risk category, there were 26 deaths according to the HCFA calculations. Our review resulted in 8 deaths remaining in this category as evidenced by the following. Of course, each death will be studied carefully as part of the hospital's quality assurance activities. Of the 18 cases deleted from the low-risk category, sixteen appear in the other heart categories, one was moved to another non-heart category and one of the deaths occurred at another hospital and should not have been in Presbyterian's rates.

1) In the low-risk heart disease category, the mortality rate dropped from 9% to 3% once the data was verified as discussed below. This new percentage is at the low point of the predicted 3 to 8% range.
2) In the severe chronic heart disease category, the mortality rate increased from 18% to 24% based on the cases discussed below. This new percentage is well within the predicted 17 to 33% range.
3) In the acute heart disease category, the mortality rate increased from 21% to 26% based on the cases discussed below. This new percentage is well within the predicted 25 to 46% range.

SPECIFIC ILLUSTRATIONS OF METHODOLOGY FLAWS IN LOW RISK HEART CATEGORY

The following are four cases in which there were complications of an acute myocardial infarction but the primary diagnosis was listed otherwise therefore resulting in assignment to a low risk category:

1) A transfer patient with a history of a prior myocardial infarction who was suffering from pulmonary edema and recurrent chest pain at rest, was admitted for emergency bypass surgery.
2) This patient who was admitted with chest pain and an acute myocardial infarction subsequently developed cardiogenic shock and died. The primary diagnosis was listed as electromechanical dissociation and coded as a benign rhythm disturbance.
3) The primary diagnosis was listed as coronary artery disease and the secondary diagnosis as recent myocardial infarction. This patient was transferred from another hospital in cardiogenic shock on an intra-aortic balloon pump.
4) Patient had a history of coronary artery disease and was admitted for complications as a result of surgery at another hospital. Autopsy showed an

acute myocardial infarction. However the primary diagnosis was listed as coronary artery disease instead of acute renal failure which was listed as a secondary diagnosis.

The following are six cases in which the functional manifestation of the underlying disease, congestive heart failure, was not considered in the severity ranking. In each of these cases the primary diagnosis was listed as a valve disorder thereby resulting in a low risk heart classification even though these patients were gravely ill. Congestive heart failure is not considered as a comorbid condition.

1) Patient was admitted at another hospital for acute pulmonary edema and transferred to Presbyterian with degenerative aortic stenosis and in cardiogenic shock.
2) Patient was transferred from another hospital in severe congestive heart failure due to rheumatic mitral and aortic valve disease.
3) Patient had co-existent severe coronary artery disease, (degenerative aortic stenosis), with evidence of a prior inferior myocardial infarction and was admitted in acute pulmonary edema.
4) Patient was also suffering from severe coronary artery disease and underwent coronary artery bypass grafting and aortic valve replacement.
5) Patient was also suffering from congestive heart failure.
6) Patient was severely ill with steroid dependent asthma andcongestive heart failure. This patient was admitted with mitral regurgitation due to previous bacterial endocarditis on a prolapsed valve for an attempted cardiac catherization.

The following four cases concerned patients with severe chronic congestive heart failure or acute heart failure due to coronary artery disease. In each case, the primary diagnosis listed was coronary artery disease. The methodology used in the HCFA study classifies unstable angina in the same low risk category as chronic angina, thereby failing to take into account the large number of patients with this acute complication.

1) This patient was admitted with unstable angina complicated by pulmonary edema requiring an emergency operation.
2) This patient had recurrent rest angina complicated bypulmonary edema and developed cardiogenic shock. Patient died while undergoing emergency cardiac catheterization.
3) Patient had severe congestive heart failure. Patient died at another hospital so this case should not have been included in Presbyterian's mortality rates in any event.
4) Patient was transferred from another hospital sufferingfrom cardiomegaly, pulmonary rales and atrial fibrillation and died outside of hospital.

There were four cases listed in the low risk heart category due to coding errors by physician or medical record coders. In each case, the patient was suffering from a high risk condition.

1) Primary diagnosis listed as end stage renal disease but wascoded as benign hypertensive renal disease. The patient's family had requested that no extraordinary measures be used and the patient died in the absence of such measures.
2) Primary diagnosis listed by physician as "recent acutemyocardial infarction". Apparently the use of the term recent resulted in the low risk classification even though the patient clearly had a history of coronary heart disease and a prior myocardial infarction.

3) Primary diagnosis listed as mitral stenosis followed by CHF.The correct coding would have been congestive rheumatic heart failure.
4) This patient was admitted for an infection but had a historyof coronary artery disease, and arrested twice in the hospital due to a complete heart block.

CONCLUSION

All of the verified data will be incorporated into the hospital's quality assurance review activities. As illustrated by the above discussion, these mortality rates are at best a starting point for Presbyterian to use in continuing to meet and enhance its quality patient care mission. Presbyterian welcomes attempts to provide quality data but recognizes the current limitations of the model and urges further refinement to increase the value of these statistics before they are considered to be meaningful data concerning the quality of care rendered within hospitals.

PUNXSUTAWNEY
AREA
HOSPITAL
R.D. #5, Route 36 North • Punxsutawney, Pa. 15767 • (814) 938-4500

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Inforamtion
P.O. Box 26684
Baltimore, MD 21207

RE: Punxsutawney Area Hospital, Medicare Provider #390199

Gentlemen:

Please find enclosed a response for the above named provider relative to the planned release of mortality data in December 1987.

Minor errors were noted in the reported data which are reflected on the Reporting Error Worksheet attached.

Should you require clarification regarding our submissions, please contact me at your convenience.

Sincerely,

Daniel D. Blough
Administrator

DDB/dt
enclosure

HCFA Mortality Release Comments
Punxsutawney Area Hospital, Medicare Provider #390199

The data source utilized by HCFA indicates that a total of 85 Medicare patients admitted to Punxsutawney Area Hospital in calendar year 1986 expired within 30 days of admission. Of these, HCFA indicates 64 died while inpatients at this facility, and 19 died within thirty days of discharge or transfer to a sub-acute level of care. In a relative sense, our analysis of the medical records of deceased Medicare beneficiaries supports the accuracy of the reported data. There are minor variations in the number of deaths, type of death and hospitalization status which we clarified to HCFA. Our data, garnered via case by case medical record review, details 86 Medicare beneficiary deaths with 70 occurring in the hospital and 16 occurring within thirty days of patient discharge. Reporting errors are limited to the category of pulmonary disease in which our records reflect two unreported Medicare deaths and one death occurring after patient transfer to a tertiary facility erroneously credited to this Hospital.

In none of the diagnostic categories does the hospital's actual mortality rate fall outside of the range of predicted mortality rates generated by HCFA's statistical model. However, there are several explanatory factors that may account for the hospital's mortality indicators in several diagnostic categories which appear to approach the upper quartiles of the expected rates.

Age

Punxsutawney Area Hospital serves a disproportionate share of elderly residents when comparisons are noted with state and national indicators. Of the 85 HCFA reported mortalities, the mean age at the time of death was 80.3 years, considerably higher than the male and female lifespan. The inevitable infirmities of age and the subsequent higher incidence of serious co-morbid and complicating conditions limit provider treatment strategies and successful intervention.

Sample Size

In analyzing the data, it is important to recognize that the Punxsutawney Area Hospital is a rural primary care oriented facility drawing small numbers of patients in given diagnostic categories. Accordingly, the smaller number of admissions, the less reliable are statistics due to random variations of outcomes in individual cases. Interpretations should therefore be rendered with caution. For example, in the category of cancer, one patient suicide post discharge dramatically skewed unfavorably the mortality indicator considering the low total number of reported cancer cases managed in this facility. Further, in the category of metabolic/electrolyte disturbances, the hospital recorded ten Medicare admissions with four subsequent mortalities or a mortality rate of 40%. Analysis of the medical record indicates that in all four of the reported deaths, the principal diagnosis (by which the HCFA model

categorizes mortality) is not the cause of the patient's death. All four beneficiaries had significant co-morbid conditions not considered in the HCFA model, as well as an inordinate number of complicating conditions. A similar point can be raised in the HCFA diagnostic category of sepsis. In all of the reported mortalities in this category, the sepsis or septicemia is a reported condition causing the patient's admission to the hospital with the patient susequently expiring of underlying chronic terminal conditions. Therefore, interpretations regarding this provider's ability to manage the septicemic patient to a successful outcome should be rendered carefully.

Patient/Family Wishes

The limited availability of skilled nursing beds, as well as the lack of appropriate hospital or respite care programs throughout the hospital service area, requires the hospital to continue to serve a role for terminally ill patients with chronic degenerative conditions. In 71% of the reported mortalities (who cannot be managed at sub-acute levels of care or who are transferred from tertiary facilities) death was an expected outcome at the time of the patient's admission.

Further, our analysis reveals that in 71 cases or 83.5%, family/patient requests consistent with Do Not Resuscitate policies precluded maximal therapeutic intervention that may have prolonged life longevity without regard to the quality of that life extension.

Lifestyle

The data generated via the HCFA statistical model does not take into account variations in lifestyle between communities. Over 40% of the adult population throughout the primary service area complete less than twelve years of formal education. Other relevant socioeconomic indicators also signifcantly deviate from average. The economy of the area is primarily agrarian and supported by the coal mining industry. These factors combined affect the levels of appropriate healthful lifestyles in the community, personal health awareness, patient compliance with treatment regimens and consumer willingness and ability to access health care providers. Ultimately, these factors compromise the timeliness and effectiveness of our intervention as health care providers.

For the above reasons we believe that the HCFA data should not be interpreted as definitive measures of hospital performance and should not be utilized as the basis for judging the quality of care provided by Punxsutawney Area Hospital. Rather, this data should be utilized to better focus hospital and federally initiated quality assurance programs.

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	6	1	6	1
CE -- Cerebrovascular Accidents	6	2	6	2
GC -- Gastrointestinal Catastrophes	0	0	0	0
GI -- Gastrointestinal Disease	1	1	1	1
GU -- Urologic Disease	1	1	1	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	0	0	0	0
HM -- Severe Chronic Heart Disease	7	1	7	1
HS -- Severe Acute Heart Disease	16	1	17	0
ME -- Metabolic/Electrolyte Disturbances	2	2	2	2
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	10	8	12	7
RN -- Renal Disease	0	1	1	0
SE -- Sepsis	4	0	4	0
TR -- Severe Trauma	1	0	1	0
OP Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	12	1	12	1
Total -- All Categories	66	19	70	16
	85		86	

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Quakertown Community Hospital
Eleventh St. and Park Ave., Quakertown, PA 18951 • (215) 536-2400

October 19, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration,
P.O. Box 26684,
Baltimore, MD 21207

Dear Dr. Roper: Re: Hospital ID Number 390035

In response to your letter of September 21, 1987, we would like to provide comments regarding the hospital-specific 1986 mortality data to be published by HCFA in December.

Your office should be complimented for handling the public release of this data in a more responsible fashion than in the past. However, at Quakertown Community Hospital we remain very concerned about this type of information and the manner in which it has been subject to misinterpretation by the press and the public. There must be clear recognition of the fact that an individual hospital's mortality data, whether demonstrating high or low experience relative to HCFA's "predicted" rates, cannot be used to form a judgement of the quality of care within that facility. At Quakertown Community Hospital, mortality information has been used for a number of years as part of our quality assurance program, to screen cases for further in-depth review. The usefulness of mortality data as a generic screen is evident, but the statistics in and of themselves cannot be used as an indicator or measure of quality.

With that caution, we have reviewed the data provided specific to Quakertown Community Hospital. For all diagnostic categories, the number of deaths which occurred in 1986 fell within the range of predicted mortality as determined by HCFA's methodology. We would like to comment on the data for one category, that of severe acute heart disease (HS), where our experience fell at the top of HCFA's predicted range (21 deaths out of 39 cases), and offer the following considerations:

- Our internal records show a total of 66 admissions for this group of diagnostic codes, not 39. According to HCFA, this discrepancy is explained because the totals reflect only the last admission of the year for each patient. As we do not have access to information on the subsequent admission of patients to other hospitals, we cannot verify the accuracy of the stated total.

- Of the 21 deaths, two occurred in nursing homes several days after discharge, yet were still credited to the hospital.

- Of the 19 other cases, seven were "No Code" as requested by the patients' families in concurrence with the physicians involved and hospital policy. The decisions to allow death with dignity reflect the terminal nature of these cases, with little expectation of survival beyond the hospital.

As these factors, among others, are not accounted for by HCFA's methodology, it is important to point out that the range of predicted mortality might well be expanded given the characteristics of a particular hospital. Any attempt at a definitive interpretation of these statistics should be viewed with extreme skepticism, as there are no easy substitutes for a detailed, comprehensive quality assurance process to demonstrate that medical care rendered in a hospital setting is of the highest quality.

Thank you for the opportunity to comment. We would be willing to explore these issues further with your office if needed.

Sincerely

Kate J. Flynn
Chief Operating Officer

Jeffrey Lenow, M.D. J.D.
Medical Director

The Reading Hospital and Medical Center

Reading, Pennsylvania 19603 Telephone 215-378-6000

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health and
Human Services
Health Care Financing Administration
Washington, DC 20201

Dear Dr. Roper:

We have completed a preliminary review of the mortality information. Based upon the range of predictable mortality rates, the Hospital actual mortality rate is favorable. We do not dispute the value of mortality data in combination with other valid clinical statistics in measuring the Hospital performance. However, the use of mortality rates alone could only be of value in the detection of extremely low quality care.

In addition, the post-admission mortality rate will result in attribution to the hospital of deaths that may be unrelated to the condition of the patient that was under treatment. Furthermore, there is not historical statistical model to comparitively evaluate the data.Deviations from the predictable mortality rate could indicate some problem with the quality of care but it could also reflect the exclusion from the model of significant factors influencing the risk of death. Whether the hospital whose actual mortality rates are outside the predictable range are more or less likely to provide higher or lower quality care is unknown. Statistical anaylsis of mortality rates can do no more than be a screen for further review. Quality judgments can only be made after reviewing the information contained in the patient's medical record.

HCFA has openly acknowledged the limitations of the data and the need for continued refinement in the statistical model. Release of the mortality rates may provide a misleading picture of the quality of services and hospital performance.

Very truly yours,

Charles B. Sullivan
President

/sae

Riddle Memorial Hospital

Provider # 390222

October 8, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sirs:

Riddle Memorial Hospital has conducted a thorough review of our mortality data. Our records indicate that the following information is inaccurate.

HICH	Surname	Discharge Date	Date of Death	Concern
[redacted]		3/21/86	3/22/86	Death occurred 3/21/86
[redacted]		9/29/86	9/30/86	Death occurred 9/29/86
[redacted]		12/27/86	12/29/86	Death occurred 12/27/86

Kindly make the above corrections to our data.

Should you have any questions, please do not hesitate to contact me at (215)566-9400, extension 3350.

Your cooperation with this matter is appreciated.

Sincerely,

Camille G. Lombardo, RN

Camille G. Lombardo, R.N.
DRG Coordinator

CGL/bad
4406

U.S. Route One • Media, Pennsylvania, 19063-5177 (215) 566-9400

Riddle Memorial Hospital

Provider # 390222

October 9, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Sirs:

Enclosed are Riddle Memorial Hospital's comments that we have prepared for publication with the release of our mortality data planned for December 1986.

If you have any questions, please do not hesitate to contct me at (215)566-9400, extension 3350.

Your cooperation with this matter is appreciated.

Sincerely,

Camille G. Lombardo

Camille G. Lombardo
DRG Coordinator

CGL/bad
Enc.

Riddle Memorial Hospital

Provider # 390222

The data presents mortality information about Medicare patients treated at Riddle Memorial Hospital during 1986. The statistics show the number of Medicare patients admitted, the actual percent of these patients who expired within 30 days of their last admission of 1986 and the Hospital's specific predicted range of the percent of patients who would have been expected to expire given adjustments for specific patient characteristics. Since the predicted ranges are specific for Riddle Memorial Hospital, the comparison of statistics among or between hospitals is meaningless.

Riddle Memorial Hospital has conducted a thorough review of our mortality data. The average age of these mortalities was 80.5. It is significant to note that Riddle Memorial Hospital treats an unusual high proportion of Medicare nursing home patients within our service area. For example, during FY 1985, Riddle Memorial Hospital transferred 21.7% of all Medicare patients to other health care facilities. Of these 21.7%, approximately 80.1% of these transfers went to a nursing home facility. In comparison on a statewide basis, 19.2% of Medicare patients were transferred to other health care facilities. However, only 41.9% of these transfers went to a nursing home facility. Thus during FY '85, Riddle Memorial Hospital transferred approximately double the statewide average of Medicare patients to nursing home facilities.

Finally, it is important to note that the predicted mortality ranges do not account for the patient's severity of their illness at the time of admission or, in other words, the stage of the patient's particular illness at the time of admission. Obviously, this factor can be a vital predictor in calculating expected mortality rates. This severity indicator can have a significant impact on an institution's actual mortality rates, if, in fact, a particular institution is treating patients who are in a more advanced stage of their illness at the time of admission. Incorporating a measurement of patient severity will undoubtedly improve the reliability of the data.

4406/bad

U.S. Route One • Media, Pennsylvania, 19063-5177 (215) 566-9400

Robert Packer Hospital
Guthrie Square, Sayre, Pennsylvania 18840 • Telephone (717) 888-6666

October 23, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Dear Sir:

The level of confidence that can be placed in the HCFA Mortality Data must be questioned given that the model does not consider all factors that influence the risk of death. Significant deviations from the predicted mortality rate could be the result of either differences in the types of patients admitted to the hospital or the differences in patient treatment. The HCFA model fails to consider a wide range of factors that have a significant impact on mortality: such factors as patients general health status, the stage of patients illness, and the attribution of factors unrelated to the condition of the patient at the time of discharge but occurring within the 30 day post-admission period.

The data will identify or suggest areas that might warrant further review. The mortality data, however, will not identify areas in which a hospital provides high or low quality care or measure hospital performance.

Appropriate assessment of hospital performance is dependent upon many variables and requires a review of quality indicators of which mortality is but one. Significant quality judgments can only be made after reviewing the information contained in a patient's medical record. Therefore, use of HCFA mortality data as a means of comparing a hospital's ability to deliver quality care is questionable.

Sincerely,

Gary B. Morrison
President

GBM/pn

Rolling Hill Hospital
60 E. Township Line Road
Elkins Park, Pennsylvania 19117
Telephone (215) 663-6000

Frederick L. Hollander, FACHE
Executive Director

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper,

Thank you for the opportunity to comment on the hospital data scheduled to be published by HCFA in December, 1987.

Rolling Hill Hospital's administration, medical staff and governing board are committed to the provision of quality medical care. The measurement of that quality is multi-faceted, complex and includes an ongoing monitoring and analysis of mortality rates as one element in our quality assurance program. We want it to be understood, however, that our continuing efforts to ensure high quality medical care should and do go far beyond the measurement of death.

The data to be published by HCFA on mortality rates for Medicare patients in 16 diagnosis related groups (DRGs) is useful to us and other hospitals as a tool to identify clinical areas for further evaluation. However, it is severely limited in its usefulness to the general reader. HCFA has improved its statistical model, but has not yet been able to include many factors which affect mortality rates such as the severity of a patient's illness and whether a patient was transferred from another health care facility. Moreover, the ability of the statistical model to detect differences in hospital quality has never been evaluated.

We believe that Rolling Hill Hospital meets and exceeds accepted standards of medical care. Our quality assurance program includes an in-depth review of every patient's care for quality and appropriateness by medical staff and other

health professionals. Earlier this year, the Joint Commission on Accreditation of Hospitals reviewed our entire facility including quality assurance programs in every area of patient care and has again awarded the hospital full three year accreditation.

The data being published in December is just a first step in helping the public understand and assess the quality of medical care in the United States. We agree that this is an important goal. But we emphasize that it is at best a preliminary step toward defining and measuring quality and has severe limitations. It would be a mistake to evaluate hospital care on the basis of these data.

Rolling Hill Hospital is committed not only to the measurement of quality but to ensuring quality care for all our patients. We will continue to evaluate the care we provide using established standards and indicators including, but not limited to, mortality. And we hope that in the future, data offered to the public will be based as well on patient outcome and clinical function.

Thank you again for the opportunity to comment on these data.

Sincerely,

Frederick L. Hollander

ROXBOROUGH
MEMORIAL HOSPITAL
5800 Ridge Avenue · Philadelphia, PA 19128
215/483-9900

Medicare Provider #390135

October 27, 1987

William Roper, M.D.
Department of Health and Human Services
Health Care Financing Administration
Washington, DC 20201

Dear Dr. Roper:

This letter includes comments which we would like to make regarding the selected mortality information on Medicare patients treated in 1986 which HCFA is planning to publish in December, 1987. We would like our published comments to read as follows:

> Roxborough Memorial Hospital would like to take this opportunity to comment that, although this Hospital's mortality rates as reported by HCFA fall below or within the lower part of HCFA's range of predicted mortality rates, we do not feel that mortality rates are good predictors of either low or high quality of care. Such mortality data should only be used as a guide or focus for peer review by physicians and qualified health professionals. Quality care can only be evaluated through the peer review process and not by simple statistical comparisons. The measurement of quality of care within a healthcare setting is very complicated and there are many healthcare organizations presently developing methods of evaluating hospital quality that rely on measures other than just mortality rates.
>
> The data used by HCFA indicate that a total of 184 Medicare patients admitted to Roxborough Memorial Hospital died within 30 days of admission. The HCFA data also indicates that 1,616 Medicare admissions occurred in 1986; our own Hospital records indicate that in fact 2,737 Medicare admissions occurred in 1986. Possibly, the descrepancy may be caused because the statistics may not reflect repeat admissions to the same hospital or may be affected by multiple admissions of individual beneficiaries to different hospitals. Roxborough Memorial Hospital has no way of verifying the number of Medicare patients which HCFA is reporting as having been treated at this Hospital. We would also like to state that, without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic data used in the analysis.

Thank you for this opportunity to comment on the data.

Sincerely,

Marvin Mashner
President

MM/las

Sacred Heart Medical Center

October 28, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health & Human Services
6325 Security Boulevard
Baltimore, MD 21207

October 28, 1987

REF Medicare Provider
No. 39-0148

Dear Mr. Roper:

Please reference your communication of September 21, 1987 to us forwarding mortality information about Medicare patients treated in this institution in 1986.

We reviewed the information provided by HCFA and then reviewed our own records. Within the limits of our understanding of the analytic techniques used by HCFA, the information provided to us seems accurate. However, our records indicate that there were ten additional Medicare deaths in 1986 that are not included in your information. UB-82 claim forms for these ten patients are enclosed.

In the possible use of this information to measure quality care your correspondence describes certain cautionary notes to be included by HCFA in the public release of this information. Experience teaches that such notes will be disregarded by many and considerable distortion of the meaning of the data will result. That is unfortunate.

Thank you for the opportunity to comment.

Sincerely,

Sister Mary Margaret

Sister Mary Margaret
President

SMM:mm

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Ninth and Wilson Streets, Chester, Pennsylvania 19013 • (215) 494-0700

SACRED HEART HOSPITAL
AND
REHABILITATION CENTER

1430 DeKALB ST., NORRISTOWN, PA.
PHONE: 278-8200

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Re: HCFA Mortality Data Comments

Dear Sirs:

In accordance with the letter from William L. Roper, M.D. dated September 21, 1987, enclosed please find the comments of Sacred Heart Hospital, Norristown, PA (Medicare Provider #390159) on the 1986 HCFA Mortality Data which we would request be incorporated with the planned December, 1987 publication of this information.

Also attached is supporting documentation which makes one technical correction with respect to a date of death which we do not wish to be published. [redacted] who is listed under the cancer mortality category as having a date of death of 3/31/86. The correct date of death should be 4/13/86 and attached is a copy of the death certificate relating to this patient.

Thank you for the opportunity to submit these comments.

Sincerely,

A. C. Godin
President

ACG/mc

enc.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

SACRED HEART HOSPITAL
AND
REHABILITATION CENTER

1430 DeKALB ST., NORRISTOWN, PA.
PHONE: 278-8200

Comments on the HCFA Mortality Data
Sacred Heart Hospital, Norristown, PA
Medicare Provider # 390159

General Comments

William L. Roper, M.D., Administrator of the Health Care Financing Administration (HCFA), U.S. Department of Health and Human Services, in his cover letter to the hospital which provided the HCFA Medicare Mortality Data for 1986 for our review and comment states:

> "While we believe that information on hospital mortality rates is useful, until we have developed additional statistical measures to deal with complex issues such as severity of illness, we can not and do not recommend the use of the information by itself to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals."

Additionally, Stephen F. Jencks, M.D., senior research physician at HCFA, stated in a recent New England Journal of Medicine article that "serious technical problems must be solved before we will be able to infer the quality of care from death rates or other outcome measures."

Sacred Heart Hospital concurs wholeheartedly with the above two cautionary statements in terms of anyone reaching either general or specific conclusions about quality of care from mortality data alone for this hospital or any other institution. It must be noted that the statistical method or model utilized has inherent limitations in terms of its usefulness. For example, the model is based upon an average probability of death and even then incorporates only some of the key characteristics necessary to properly differentiate between the varying severity of patients treated at particular institutions. Some key factors affecting the condition of a patient or their expected outcome which are not included in the model utilized by HCFA include a valid measure of severity (i.e., how ill the patient was at the time of admission), whether the patient was transferred to the hospital from a nursing home, whether the patient had a terminal illness or the patient's general health status.

Knowing the limitations of mortality data alone as a sole or valid quality indicator, Sacred Heart Hospital and its Medical Staff have developed and maintained for many years a formalized and intensive internal program of reviewing, analyzing and improving the quality of care provided to all of its patients. This program of peer review which is based upon the standards of the Joint Commission on the Accreditation of Hospitals, Medicare peer review requirements, various licensing bodies and other entities involved in the review and improvement of medical care is performed on an ongoing basis and involves all of the deaprtments within the hospital. The program is based upon many

different criteria against which the care of individual patients, taking into account all of the significant factors related to their specific circumstances, is compared. If specific situations or patterns are identified, further review is accomplished and corrective action is initiated. As part of the hospital's peer review and quality assurance program, all deaths are individually reviewed to focus on potential areas of improvement. This is partially because at the time of admission of many patients, particularly patients in the Medicare population which this data exclusively addresses, death is the expected outcome and medical intervention will not alter that outcome.

With respect to the HCFA mortality data for Sacred Heart Hospital, it should be noted that these published rates include patients who expired within 30 days of admission to the hospital but in 25 of the cases death was after discharge from the hospital and in some cases up to some seventeen days after their discharge from the hospital. In many of these 25 cases, death was imminent or expected because of the patient's poor health or disease status and the patient and/or family chose to not request heroic measures because of the prognosis and thus, the patient was discharged to a nursing home or their own home. We feel it important to note that of the 25 deaths included in these figures for Sacred Heart Hospital which occurred after discharge from the hospital, only 8 expired - from the same principal diagnosis for which they had been treated in the hospital. Ten expired as a result of a condition which was a secondary factor in their prior admission which could have been chronic or terminal in nature but was not the reason for the admission; and seven died from causes that were unrelated to either the principal or secondary diagnoses or conditions evident during their last admission to the hospital.

Data Accuracy

To the extent that the hospital has the ability to check the raw data which are included in the information from HCFA, there is one technical correction that should be made and this has been communicated separately to HCFA. This involves an incorrect notation of a date of death which does not appear to affect the basic data.

Other Comments

As an illustration of some of the individual patient factors that must be considered as part of a comprehensive peer review process to obtain an appropriate and valid perspective of mortality data, we would briefly like to comment more specifically on the category of cerebrovascular accidents. A review of the cases in this particular category reveals the following information that must be considered before using just mortality data as a measure of care provided to patients. Of the twenty-two (22) Medicare mortalities included in these statistics for Sacred Heart Hospital:

1. Five (5) patients, or twenty-three per cent (23%), were ninety (90) years of age or older.

2. Sixteen (16) of the patients were admitted through the emergency department which is an indication that upon arrival at the hospital an acute process or condition existed.

3. Two cases were diagnosed with what is called subarachnoid hemorrhage (bleeding into the brain) which by definition has a poor outcome.

4. Ten (10) cases, or forty-five per cent (45%), had a formal notation

in the medical record at the time of or shortly after admission that no aggressive treatment would be provided because of the poor expected outcome or condition of the patient. This was based upon a decision between the patient and/or the family and the physician.

5. Twelve (12) cases did not expire as a direct result of their cerebrovascular condition but because of significant underlying cardiac disease or in two (2) cases from a traumatic injury.

Therefore, in an evaluation of mortality data the individual circumstances relating to a particular patient must be reviewed as part of a comprehensive peer review and quality assurance program to determine the significance of a mortality rate and the care provided.

SACRED HEART HOSPITAL

421 Chew Street
Allentown, PA
18102

(215) 776-4905

October 26, 1987

William L. Roper, M.D.
Administrator
HEALTH CARE FINANCING ADMINISTRATION
HEALTH STANDARDS & QUALITY BUREAU
HOSPITAL MORTALITY INFORMATION
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

SUBJECT: Mortality Data -
Medicare Provider #: 39-0197

We appreciate the opportunity to review and comment on mortality data related to Medicare patients of Sacred Heart Hospital in 1986 as proposed to be released by HCFA during December 1987.

We have reviewed the data and find that it reflects rather closely our internal data in terms of mortality. We would stress, however, that mortality rates alone cannot be used to judge quality of care, and that although significant improvements have been made in refining the data, other characteristics must be factored into any such formula for quality to be appropriately reflected.

Sincerely,

Kenneth G. Turner
Senior Vice President

KGT:mfd

Saint Vincent
Health Center

232 West 25 Street
Erie, Pennsylvania 16544
814/452-5000

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Dear Dr. Roper:

Historically, Saint Vincent Health Center and other health care providers have supported in theory and practice the concept of quality assessment. One means of assessing the quality of patient care is by looking at outcomes; and a most obvious and important outcome is mortality.

The Health Care Financing Administration (HCFA) has compiled and published mortality statistics on Medicare patients in individual hospitals. While these statistics are seemingly accurate, they are meaningless in their present form. They lack adjustments for severity of illness.

According to an editorial in the New England Journal of Medicine, January 15, 1987, research demonstrates that "the problem with using death as an outcome is that the most important predictor of death is severity of disease."[1] Without adjustments for severity, gross mortality statistics paint an unclear and -- more importantly -- erroneous picture of the quality of care if comparisons are made.

Consider this. Research by Pollack et al in six intensive care units turned up a sixfold difference in mortality rates -- before adjustments for initial severity of illness. Once severity was considered, the differences in mortality rates disappeared.[2]

According to this and similar studies[3], intensive data collection techniques and the translation of crude mortality rates to adjusted mortality rates are essential for interhospital comparisons. Without these things, we truly are comparing apples to oranges. This comparison in itself is dangerous because it creates sensational and erroneous headlines and, more importantly, cannot be used internally to assess quality of patient care. Health care consumers must understand that the HCFA mortality rate data -- whether it reflects well or poorly on an institution -- cannot be used as a measurement of the hospital's performance.

Saint Vincent and its medical staff agree with HCFA's premises that quality of care should be measured and outcome assessment is the most reasonable and meaningful method. But we stand firm in our belief and knowledge of the data's limitation because of the lack of a severity measure.

The HCFA data will be incorporated as yet another means of checks and balances in quality review efforts at Saint Vincent. At present, the health center's rigorous quality assurance efforts include:

1.) Peer review;
2.) Mortality reviews by individual medical departments;
3.) Mechanisms for suspending physicians practicing inappropriate care; and
4.) Other hospital quality assurance functions.

Because of the information cited above, Saint Vincent Health Center is initiating a system that judges severity of illness in the review of individual patient cases so that mortality rates will truly have some meaning in assessing quality of patient care.

Sincerely,

SAINT VINCENT HEALTH CENTER

Sr. Margaret Ann Hardner
President

Enc.

REFERENCES

1. Schroeder, Steven A., "Outcome Assessment 70 Years Later: Are We Ready?", New England Journal of Medicine, 1987; 316:160-2.

2. Pollack, M.M. et al., "Accurate prediction of the outcome of pediatric intensive care: a new quantitative method." New England Journal of Medicine, 1987; 316:134-9.

3. Knaus, W.A. et al., "An evaluation of outcome from intensive care in major medical centers." Annals of Internal Medicine, 1986; 1-4:410-8.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC WELFARE

SCRANTON STATE GENERAL HOSPITAL
Scranton, Pennsylvania 18501

TELEPHONE NUMBER
AREA CODE 717, 963-4211

October 23, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

Thank you for the opportunity to comment on the Medicare mortality statistics at Scranton State General Hospital in 1986.

Our records show that Scranton State General Hospital had 837 Medicare admissions in 1986, as opposed to 504 shown on your report. Our actual mortality rate, therefore, is 9.0% rather than the 15% in your report.

Medicare patients represented 41% of our total admissions in 1986. Our patients tend to be older, very often elderly, and because of the diagnostic related groups, much sicker than in the past. Your mortality table shows that, among the Medicare patients who died at Scranton State General Hospital during 1986, the average age at death was 78 years.

It must be pointed out that 61 of the 75 deaths (81%) were 70 years of age or older. In addition, 36 of the 75 (48%) died within five days of admission, while only 13 (17%) died following discharge.

It is my understanding that Northeastern Pennsylvania has the second oldest average age population in the nation. Considering the nature of our community and the type of patients seen at Scranton State, I consider a mortality rate of 9% among Medicare patients quite low.

Once again, thank you for the opportunity to comment on the HCFA report.

Sincerely,

W. David Keating

W. David Keating
Administrator

WDK/pm

cc: Board of Trustees
Elinor Daley
Kelly Gratzinger

SEIDLE
MEMORIAL
HOSPITAL

East Simpson & Filbert Streets
Mechanicsburg, Pa. 17055
(717) 766-7691

#390014

October 27, 1987

TO: Health Care Financing Administration

FROM: Seidle Memorial Hospital

SUBJECT: Mortality Rates

After close review of our mortalities for 1986, we have listed the patient's who were No Case I patient's, terminal cases and the one mortality at an outside facility.

Due to the small case load, the predicted range is meaningless for our facility.

Please see the attached analysis of our mortalities.

Thank you,
Vignon Smeigh
Vignon Smeigh
Manager of Medical Records

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

SEIDLE
MEMORIAL
HOSPITAL

East Simpson & Filbert Streets
Mechonicsburg, Pa. 17055
(717) 766-7691

#390014

Total cases for 1986, Seidle Memorial Hospital - 20
of those 20 cases:

1 - expired outside of hospital (home)

1 - expired at outside facility (Polyclinic Medical Center)

13 out of the 20 cases were referred to as no case I (no recessitation if arrest occurs)

2 cases were noted terminal end stage

Due to the small case load the predicted range is meaningless for our facility. e.g. -

1 - patient in catagory of Renal Disease yields 100% actual mortality rate causing range to be greater than predicted rate.

- no case I (no resuscitation)
- " " "
- " " "
- " " "
- " " "
- " " "
- " " "
- " " "
- " " "
- " " "
- " " "
- " " "

Terminal cases

- " " "

Mortality at outside facility

SEWICKLEY VALLEY HOSPITAL, SEWICKLEY, PENNSYLVANIA 1514
NEW - PLEASE NOTE: DIRECT DIAL ADMINISTRATION: (412) 749-7000

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

We wish to offer comments regarding the recently issued Hospital Mortality Information for Sewickley Valley Hospital, Medicare provider number 390037. The reports indicated we exceeded the range of predicted mortality in only one category, Low Risk Heart Disease.

As we researched our cases in this category we determined that Sewickley Valley Hospital was erroneously credited with three patients who ceased to breath at other acute care facilities.

Additionally, Sewickley Valley Hospital has used the Medisgroups Severity Scoring System since 1985 and with the use of this system it is evident that patient outcome has a direct correlation to severity of illness at time of admission. In reviewing the charts of the patients categorized as "low risk heart disease", six had severity scores of 3 and 4 (ie., having significant organ failure at time of admission). We conclude that either the hospital or the government has mis-coded these patients. Removing the severity mis-coded patients, plus the three patients who expired in other hospitals from our mortality statistics reduces our mortality rate for this category to 4.2%, well below national norms.

Sincerely,

Donald W. Spalding
President

DWS/gh

Donald W. Spalding, *President*

Telephone (412) 741-6600

SHADYSIDE
HOSPITAL

5230 Centre Avenue
Pittsburgh, Pennsylvania 15232
412/622-2010

Henry A. Mordoh
President

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Enclosed are the comments of Shadyside Hospital regarding the HCFA mortality data to be released in December, 1987. We have endeavored to keep our comments succinct and to the recommended two pages.

Please be assured of Shadyside Hospital's commitment to quality of care and the desire to communicate useful information to the public.

Sincerely,

Henry A. Mordoh
President

Enclosure

SHADYSIDE HOSPITAL
Pittsburgh, Pennsylvania

RESPONSE TO HCFA MORTALITY STATISTICS

Introduction:

Shadyside Hospital is a 446-bed general medical and surgical tertiary care facility located in Pittsburgh, Pennsylvania. The institution serves as a regional referral hospital for western Pennsylvania, parts of Ohio and West Virginia. Approximately 33% of the Hospital's referrals are for cardiac disorders and generate from outside the immediate service area. Full-time directors in the Departments of Internal Medicine, Family and Community Medicine, Surgery, Anesthesiology, Diagnostic Imaging, Obstetrics and Gynecology, Pathology and Emergency Medicine, and chiefs in the Divisions of Cardiology and Neurosurgery have further enhanced the Hospital's status as an advanced-teaching institution.

The Hospital's major specialties include Cardiology and Cardiothoracic Surgery, Neurosurgery, Endocrinology, Oncology, Orthopedics, Pulmonary Medicine, Obstetrics and Gynecology, as well as Family Practice and Internal Medicine.

There are 372 physicians on active staff and approximately 1,900 full- and part-time employees. The Hospital had 14,791 discharges in Fiscal Year 1987, and the seven-day occupancy has averaged slightly higher than 80 percent. Fifty-two percent of the patients are over age 65; of those, 55% are ages 65-74, 33% are ages 75-84 and 11% are over age 84.

Concerns with Methodology:

There are significant concerns with the methodology developed for the release of mortality statistics on Medicare patients. Major concerns are:

1. The HCFA model does not account for the stage of the patient's disease on admission, nor of the severity.

2. The data cover 14 months of information rather than one year and include admissions in December, 1985 who died within thirty days, and patients who were admitted in December, 1986 and died in January, 1987.

3. Patients who died following discharge may have succumbed to medical conditions or circumstances unrelated to their hospitalizations and this information is not reflected in the data. While it may be HCFA's wish to demonstrate a linkage between the care rendered in an institution and the patient's death, the two occasions are not necessarily synonymous.

4. The category of sepsis is not sufficiently specific, in itself, to serve as a quality indicator, since it includes a wide range of diagnoses grouped by Diagnostic Related Groups (DRGs) rather than by ICD-9-CM codes which were used for the other categories.

5. Patients transferred for continued care from a non-tertiary to a tertiary facility and counted as deaths in the tertiary facility may affect the accuracy of reports from both facilities and detracts from the ability to evaluate quality within either institution.

6. No evidence was available to demonstrate that the HCFA statistical model has been pre-tested to validate its accuracy.

Limitations of Data:

Shadyside Hospital is well within the predicted range of mortality rates in all diagnostic categories as defined by the Health Care Financing Administration. The Hospital's status as a tertiary care facility is evidenced, in part, by the high volume of patients received as emergency transfers, who frequently require surgery within 24 hours of admission, and by the volume of referrals from our regional base. Presenting data on mortalities without a contextual explanation seriously limits the understanding of the scope of the data.

As an example, the Hospital reviewed two specific categories: Severe Acute Heart Disease and Low Risk Heart Disease. Of the 119 patients listed in those categories, 53 (or 44%) were transferred to Shadyside Hospital from acute care institutions and 18 patients had surgery within 24 hours of their admission, both circumstances indicate the acute conditions of those patients.

Providing mortality data--as a quality indicator--on these two groups of patients without providing related factors in their care and treatment in a tertiary care Hospital diminishes the credibility of this kind of tool in assessing quality of care issues.

Shadyside Hospital has an active Quality Assurance program designed to continuously monitor quality indicators in the provision of patient care, and to assure that optimum standards of care are maintained. The HCFA data to be released in December, 1987 do not add anything to our ability to measure, monitor or improve our standards of care and are misleading to the public. If, therefore, it is the intent of HCFA to assist hospitals in achieving optimum levels of care and to provide the public with a useful tool for assessing the quality of care in an institution, these data do not successfully achieve either objective.

SHARON GENERAL HOSPITAL

E. J. O'Meara, President

Comments on HCFA Mortality Data

Provider No: 390211

The data used by HCFA indicates that a total of 290 Medicare patients admitted to Sharon General Hospital died within 30 days of admission. Of these, 253 died while still a patient of the hospital, while 37 died after discharge. It is impossible to determine the percentage of the 37 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record. Our own records indicate that 3,320 Medicare admissions occurred in 1986. HCFA's count is 1,914. Presumably, the discrepancy in the number of admissions reflects multiple admissions of individual beneficiaries. We have no way of verifying that HCFA's number of Medicare patients treated at Sharon General is correct.

Without detailed information concerning billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

The data does not reveal that in a majority of cases where the patient died, comorbid conditions were present that would have a negative impact on the patient's ability to recover from the illness listed as the admitting diagnosis. In addition, the data does not indicate that the average age of the Medicare patients who died within 30 days of admission was 79 years old.

Under no circumstances should this data alone be used to judge the quality of care provided.

10/87

740 East State Street
Sharon, Pennsylvania 16146

(412) 983-3911

Shenango Valley Medical Center

COMMENTS ON THE HCFA MORTALITY DATA

The statistical model developed by HCFA measures the relationship between a limited number of patient characteristics and the risk of death. HCFA has attempted to design a statistical model that predicts the risk of dying or mortality rate for different types of patients. At best, the model offers crude estimates of the expected risk of death. The model does provide accurate and reliable estimates of the relationship between each of the five patient characteristics included in the model and the risk of death. Whether these are the most significant factors influencing the risk of death is unknown, but the limited ability of these factors to explain differences in mortality rates between hospitals suggests that they are not.

In interpreting the data, you should keep two things in mind. First, the reliability of the model is unknown, but appears to be quite limited. That is, the model may accurately and reliably reflect the relationship between a small number of patient characteristics and the risk of death, but it does not reliably predict hospital mortality rates. The model fails to consider a wide range of factors with a significant impact on mortality. Examples include, but are not limited to, the patient's general health status, the stage of the patient's illness, the patient's psychological condition and family support. Moreover, changes in the way in which certain patient characteristics are measured result in changes in the predicted mortality rates for individual hospitals. The "right way" of measuring these factors is still a source of dispute.

The second, and more serious, limitation of the model is that it has not been validated. As noted above, deviations the predicted mortality rate could indicate some problem with the quality of care in that hospital, but it could also reflect the exclusion from the model of significant factors influencing the risk of death. Whether the hospitals whose actual mortality rates are outside the predicted range are more or less likely to provide higher or lower quality care is unknown. Statistical analysis of mortality rates can do no more than screen for further review. The data to be released by HCFA raise important questions, but they can not answer them. Quality judgements can only be made after reviewing the information contained in a patient's medical record. Those hospitals with actual mortality rates above or below the range of expected values should review their own data to determine whether the difference should be attributed to patient characteristics not adequately reflected in the model, to problems arising during the patient's treatment including possible problems with the treatment itself, or to unknown causes.

The data used by HCFA indicate that a total of 111 Medicare patients admitted to Shenango Valley Medical Center died within thirty days of admission. Of these, HCFA states 91 died while still a patient of the Medical Center while twenty died after discharge. Their records indicate 997 Medicare admissions. Our own records indicate that 1,597 Medicare admissions occurred in 1986. Presumable the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether their

number of Medicare patients treated at Shenango Valley Medical Center is correct. Our own records also indicate that of the 111 Medicare patients who died within thirty days of admission, 93 died while a patient and 18 after discharge. Additionally, we believe six of the patient deaths are in the wrong diagnostic category.

In examining our data concerning the deaths, we note the age of the patients range from 42 to 102 with an average of 80. With that aged of a population mix, to try and draw conclusions for the general public is erroneous.

In summation, the method used in drawing any conclusion about quality is flawed. There are errors in the data which compound the problem.

JLH/vk

SOMERSET
COMMUNITY
HOSPITAL

814·443-2626

October 26, 1987

William L. Roper, M.D., Administrator
HCFA
Department of Health and Human Services
2000 Independence, SW
Washington, DC 20201

Dear Dr. Roper;

We recognize that HCFA used "sophisticated statistical techniques" in developing the mortality information on Medicare patients; however, we do not recognize the data as a true indication of the quality of care provided by our institution. To comprise a complete picture of the degree of quality, many indicators must be examined.

When limitations are acknowledged, information such as the HCFA mortality study is interesting to examine and can be productive. However, Somerset Community Hospital feels if the data is published for the public's view, it could provide misleading ideas and thoughts about a facility's ability to deliver quality health care to its patients and the community it serves.

Thank you for the opportunity to respond to the information presented to us by you.

Sincerely,

Connie J. Ickes
QA Director/DRG Coordinator

CJI/jmr

225 SOUTH CENTER AVE. SOMERSET PA 15501-2088

SAINT AGNES MEDICAL CENTER
1900 SOUTH BROAD STREET, PHILADELPHIA, PENNSYLVANIA 19145 215/339-4100

Provider #: 39002

COMMENTS ON HCFA MORTALITY DATA

Saint Agnes Medical Center has carried out a detailed analysis of the data utilized by HCFA in compiling and calculating the published mortality rates as they pertain to this institution.

The HCFA data indicates that of the 243 Medicare patients who were reported as having died within 30 days of admission, 29 died after discharge. It is not possible for Saint Agnes Medical Center to verify the fact that these patients actually died after discharge, since information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the data available to HCFA in computing the predicted mortality rates, the accuracy of the diagnostic and/or other data used in the analysis cannot be substantiated.

Saint Agnes Medical Center serves as a regional Burn Center for the referral and treatment of major complicated burn injuries, many of which have a very poor prognosis at the time of admission. The HCFA data for the category of Severe Trauma includes these patients. 75% of the patients in this category were burn patients with significant associated complications. If Saint Agnes Medical Center were not a regional referral source for major burn injuries, only four (4) additional patients would have been included in this grouping with an associated mortality rate of 14%. This is well below the upper range of predicted mortality for these patients as quoted by HCFA which is 25%.

The mortality rates in the category of Cerebrovascular Accidents reflect an average age of 77 years for these patients. Eight (8) of the twenty-eight (28) total patients in the group were over the age of 80 and three (3) were over age 90. These patients all had severe, advanced multiple medical problems complicating their cerebrovascular accident. Considering the condition of these patients at the time of admission, with significant multi-organ system disease and/or associated malignancy they reflected a group of patients with a grave prognosis. Selecting out this very seriously ill sub-set of patients from the category would reduce the overall mortality rate to 30%. This is well below the upper limit of HCFA's predicted mortality rate of 40%.

The quality of the indicators and the model utilized by HCFA in developing these statistics are quite crude. They do not allow for the severity of illness and other significant factors which explain actual mortality rates. They also do not provide for the comparison of similar groups of patients.

Consumers are entitled to information on which to base informed choices with respect to their health care. However, crude mortality data may bear no relation to the quality of care delivered by any single institution.

Provider #: 390022

ST.
FRANCIS
HEALTH
SYSTEM

St. Francis Medical Center

SISTER M. ROSITA WELLINGER
Executive Vice President &
Chief Executive Officer

October 28, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Doctor Roper:

We have reviewed the Hospital Mortality Information sent to us on September 21, 1987. The numbers appear to be within the predicted range.

However, one category appears to be at the high end of the range, namely, low risk heart disease. We believe this could be a factor in how Health Care Financing Administration codes and classifies that particular category.

We appreciate the opportunity to review and respond to this information prior to its release to the public.

Sincerely yours,

Sister M. Rosita Wellinger

Sister M. Rosita Wellinger
Executive Vice President and
Chief Executive Officer
ST. FRANCIS MEDICAL CENTER

SMRW:gg

45TH STREET (OFF PENN AVENUE) PITTSBURGH, PENNSYLVANIA 15201 412/622-4212
Medical/Surgical *Psychiatry* *Rehabilitation Medicine*

St. John's Health and Hospital Center, Inc.

3339 McClure Avenue
Pittsburgh, PA 15212

Medicare Provider #390034

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

RE: HOSPITAL SPECIFIC MORTALITY DATA

The following is offered as comments to the Mortality Data prepared by the Health Care Financing Administration for St. John´s Health and Hospital Center.

We have noted that several errors are present in the specific list of patients; these errors include incorrect ages, incorrect admission dates, and one patient listed as a mortality who was re-admitted to our facility four months later. Considering the small number of patients from our facility and the incorrect figures, the accuracy of the data nationwide may be questionable. The patient incorrectly listed as a mortality should be removed from the HL lo risk heart disease group resulting in a 0% acutal rate.

Seven of the patients listed for St. John´s expired outside of the hospital within 30 days of admission. Six of these patients met the discharge screens utilized by KePRO to determine patient stability for discharge. The seventh patient signed out against medical advice within two hours of admission.

Of the patients on St. John´s list, 25 of the 45 patients were over the age of 75 and 18 of those 25 were over the age of 80. However, the hospital does not feel that age itself is necessarily life threatening nor indicate reasons to question the quality of care. Because of this, each of the cases were reviewed to determine co-morbid and/or complicating conditions. Of the seven patients who expired outside of the facility, all seven patients had complicating and/or co-morbid conditions. The same proved true of those patients who expired within the facility; all 37 patients had complicating conditions which possibly could be life threatening, irrespective of age.

The data presented does not distinguish quality of care, nor substandard care. The fact that the total number of patients in a medical classification is low, one death will erroneously create poor overall statistics for a facility. No where is there consideration of the patient's degree of illness nor the number of complicating conditions. In several of the specific cases reviewed, evidence was found of patient's refusal for earlier admission, patient's refusal to comply with proposed treatment plans as well as requests for no heroic measures or life sustaining treatment.

Consideration of all of these factors is necessary when presenting data. Numbers alone will only lend to a mistrust of health care facilities. St. John's Health and Hospital Center appreciates this opportunity to respond to the numbers prepared by the Health Care Financing Administration.

Sincerely,

Gerald F. Vozel

Gerald F. Vozel
Senior Vice President

SAINT JOSEPH'S HOSPITAL

100 Lincoln Avenue - Carbondale, Pa. 18407 - Telephone (717) 282-2100

COMMENTS ON HCFA MORTALITY INFORMATION

SAINT JOSEPH'S HOSPITAL
CARBONDALE, PA

HOSPITAL ID NUMBER 390095

The mortality rates for St. Joseph's Hospital are reflective on only Medicare patients who were admitted to the Hospital in 1986. Of the eighty-four patients identified in the statistics, the hospital verified that sixty-seven patients did die at the hospital and the remaining seventeen patient deaths could not be verified because the hospital has no access to information about patients after discharge. All eighty-four patients were known to have multiple complex or chronic conditions in addition to the actual cause of death. The average age of the patients was seventy-nine (four years more than the average life expectancy).

All mortality rates for St. Joseph's Hospital were within the predicted ranges even though there was no provision for the severity of illness of the patients in arriving at these rates because St. Joseph's Hospital is committed to offering quality patient care, there is an active Quality Assurance Program in the hospital. As one part of the program, all patient mortality records are reviewed by a committee of medical doctors for appropriate care and management. Therefore, all 67 records were reviewed individually in 1986. This is only one small part of review for quality care. Mortality rates alone cannot be interpreted as measures of quality. Better, more comprehensive measures are needed for the public.

Office of Administrator
16th and Girard Avenue

St. Joseph's Hospital

Philadelphia, Pa. 19130

October 23, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Washington, DC 20201

Dear Doctor Roper:

We would like to provide comments concerning the mortality information about Medicare patients treated in St. Joseph's Hospital (Medicare Provider #390077) in 1986 which will be published in December. Our comments will concern general information about St. Joseph's Hospital itself as well as information concerning an internal review of the statistics which will be published. We would also like to comment on the use of mortality statistics in the review of quality of care.

St. Joseph's Hospital is a 178 bed acute care hospital located in an economically depressed area in North Philadelphia. The hospital is a community hospital and three-quarters of its Medicare population comes from the three zip codes surrounding the hospital. The population served by the hospital is generally very poor and suffers a high unemployment rate. Forty percent of the community the hospital serves is below the poverty line.

One of the results of the fact that the hospital serves such an impoverished area is that many of the patients who are treated at St. Joseph's Hospital have a multiplicity of medical problems. Many of the patients have very serious problems such as sepsis, malnutrition, dehydration, hypertension, diabetes and anemia in addition to the primary problem for which they are admitted to the hospital. Many of the patients who come to St. Joseph's Hospital do not have private physicians and do not go to clinics or neighborhood health centers. The result is that they are often seriously and even gravely ill when they come to St. Joseph's Hospital.

The actual mortality rate for St. Joseph's Hospital for Medicare patients during 1986 was 14%. The medical records of all Medicare patients who died during 1986 were reviewed by the Quality Assurance Committee, a major Medical Staff Committee. There are several factors of importance that were revealed following review of the records. One is that 23.3% of the Medicare patients who died during 1986 were 85 years of age or older, 18.1% were between 80 and 84 years of age and 21.8% were between 75 and 79 years of age. The majority of the patients were quite elderly, as shown by the statistics, and the death reate of this age group of patients is higher than the norm by nature. Another factor of significance is that 87.5% of the patients who were included in the death rate were admitted through the Emergency Room. Such a high percentage indicates that these patients were already in a condition warranting admission on an emergency

basis. The vast majority of patients were not scheduled, elective admissions of private physicians, but were emergency admissions and in some instances, were never seen at St. Joseph's Hospital before. Due to the fact that so many of the patients were emergency admissions, the patients often were already in a gravely ill state. A third factor of significance is that 73.4% of the patients who expired had been brought to the hospital by either fire rescue squad or ambulance, indicating that the majority of patients were not ambulatory on admission, but, rather, had to be transported to the hospital by trained paramedic personnel. Another point of very considerable significance is that 34.3% of the patients who were included in the death rate were transferred to the hospital from nursing homes. These patients were often seriously ill on admission, and had a multiplicity of medical problems from which they were suffering, in addition to the problem(s) for which they were admitted to the hospital.

Of the sixteen diagnostic categories in which the mortality statistics were classified, there were two categories in which the hospital's mortality rate exceeded the range of predicted mortality values. These categories were sepsis and gastrointestinal catastrophies. The medical records of the patients in both categories who expired were reviewed by the Quality Assurance Committee. In the category of sepsis, there were eleven patients who expired. Eight of the eleven patients' were nursing home patients and all of the patients had a multiplicity of problems, in addition to the sepsis. As a measure of the severity of these patients problems, six of the patients were completely unresponsive on admission and throughout their hospitalization. Four of the eleven patients had been hospitalized previously within the year prior to their deaths for other problems they had in addition to the sepsis. Nine of the patients were admitted through the Emergency Room, and ten of the patients were brought to the hospital via ambulance or fire rescue squad. Two of the patients were also suffering from malignant carcinoma. Essentially, review of the medical records revealed that the patients who were included in the category of sepsis were, for the most part, in very critical condition, suffering from many additional medical problems, and death was either the expected outcome at the time of admission or was a very significant possibility.

The other category in which the hospital's mortality rate exceeded the range of predicted mortality values was the category of gastrointestinal catastrophies. There were seven patients in this category. Three of these patients were 90 years of age and older. Four of the patients were nursing home patients. All of the patients were admitted from the Emergency Room. In this category, all of the patients were in critical condition suffering from many additional medical problems, in addition to the problem for which they were admitted, i.e., congestive heart failure, dehydration and decubitus ulcers. As in the category of sepsis, death was either the expected outcome at the time of admission or was a very significant possibility.

As mentioned previously, although the hospital's mortality rates in the other 14 designated categories fall within the range of predicted mortality rates, all of the medical records of all of the patients who expired were reviewed by the Quality Assurance Committee. The results of the review revealed many significant factors which had been revealed in the aforementioned reviews of the categories of sepsis and gastrointestinal complications, specifically the complexity of many of the patients' medical problems, the very advanced age of the patients, the

multiplicity of the patients' problems, the very high percentage of patients admitted from the Emergency Room as well as the high percentage of patients who were transferred to the hospital via ambulance or fire rescue squad and the considerable number of patients who were transferred to the hospital from nursing homes. While no rate of mortality is insignificant, particularly to the family and friends behind the statistics, the death rate must be understood in light of the demographic characteristics and severity mix of the patients served by St. Joseph's Hospital.

It is important to identify that there are certain inherent problems with the mortality statistics that are to be released. One is that the mortality rate for the Medicare population is significantly higher than the overall hospital mortality rate, due to many of the aforementioned factors. Another problem is that only the last admission of Medicare beneficiaries admitted more than once during the year was included in the mortality statistics. This is somewhat misleading because, if a patient was admitted more than once during the year, all of the prior admissions were discounted in the calculation of the mortality rate. During these previous admissions, patients may have received the highest quality of care with extensive use of services and time of hospital personnel, but none of these admissions were counted in calculation of the mortality rate. Only the admission during which the patient expired was included in the calculation of the rate. Had the prior admissions of these patients been included, the actual mortality rate would have been considerably lower. Another inherent problem with the mortality statistics is that they do not take patient severity into account. Also, the diagnostic category into which the patient was classified is often not related to the cause of death. A patient in the category of sepsis, for example, may actually expire because of severe cardiovascular problems. Thus, certain diagnostic categories may have mortality rates that are higher than the predicted range, but the patient should more appropriately be classified in another category, thus making the mortality rate for some diagnostic categories seem artificially high.

Ensuring the highest quality of patient care is of utmost importance of the Governing Board, Medical Staff and Management of St. Joseph's Hospital. Providing the community of North Philadelphia with the highest quality of care for their medical needs is, and always has been, the primary concern of St. Joseph's Hospital. Caution must be exercised when using mortality statistics as a measure of the quality of care rendered. Mortality statistics can be used as a mechanism for review, but they cannot necessarily be used as a measure of quality especially when all factors involving the general setting of the hospital, as well as the severity of its patients' medical problems, are not taken into account. St. Joseph's Hospital has an ongoing quality review program which is devised to help the hospital look at its problem areas as well as initiate appropriate follow-up. Whenever there is an indication of a potential quality of care problem, including the results of the review of mortality statistics, this problem is addressed immediately. St. Joseph's Hospital will take any and all measures to ensure that the highest quality of care is rendered to its patients.

Sincerely,

Sister Mary Anita

Sister Mary Anita

SAINT JOSEPH HOSPITAL, READING, PA (390158)

This hospital's actual mortality rate for the 17 categories falls within the predicted range in every instance. Nonetheless, it is necessary to point out that reliance on mortality rates alone can lead to erroneous conclusions regarding quality of care. Each patient in a particular category has many clinical variables unique to himself. These variables, and the differing severity of illness they contribute to, are major factors in the outcome of patient care. Some illustrations of these points follow.

This hospital's mortality experience in the diagnostic category Cancer (CA) shows the shortcoming of emphasizing death rates without taking into account severity of illness. Some 50% of our deceased cancer patient's had metastases (spread of tumor) when first seen, and so were inoperable and incurable. Another 12% had cancer of the pancreas, an almost always fatal disorder. In an additional 6% of cases the patient and/or family directed that only basic care be given. Thus, over 2/3 of the cancer deaths at this hospital were inevitable when the patients first presented, no matter what therapy was rendered.

The need for a more precise classification of illness and its severity is also evident on review of this hospital's experience in the diagnostic category Cerebrovascular Accidents (CE). More than half of our cases had massive cerebral hemorrhage or infarction (demonstrated by CT scanning), and so had a condition virtually unresponsive to any treatment. Many others (more than half the total deaths) were patients whose survivors directed that no vigorous treatment steps be taken, decisions based on the advanced age, the multiple medical problems, and the general debility of those patients.

Review of mortality statistics in just two other categories additionally makes clear that the HCFA model needs greater specification of severity and of individual patient characteristics if it is to be a valid guide to quality of care. In our diagnostic category, Severe Acute Heart Disease (HS), 20% of the fatal cases were virtually dead on arrival in the Emergency Room, having sustained cardiac arrest elsewhere in the community. Another 30% were in cardiogenic shock on arrival, a situation associated everywhere in the nation with a mortality approximating 90%. Of especial importance is the fact that our hospital is a referral institution to which seriously ill patients are sent from other area hospitals on an emergency basis for such diagnostic and therapeutic measures as cardiac catheterization, angioplasty evaluation, placement of the intra-aortic balloon pump, and intra-cardiac electrophysiologic studies. Such transfers clearly influence mortality rates at both transferring and receiving hospital.

In the diagnostic category Metabolic/Electrolyte Disturbances (ME), the majority of our 20 deceased patients were so categorized because of dehydration. In fact, that abnormality was corrected before death in almost all instances, and death was due to non-metabolic/electrolyte factors such as terminal cancer (5 of 20), pneumonia, advanced cardiac failure and/or stroke, and generalized infection.

When the methodology better delineates severity of illness and outcomes to be expected, the provision of mortality data will be more meaningful, will better discern quality of care, and will better assist the public in an informed selection of health services.

SAINT
MARGARET
MEMORIAL
HOSPITAL

815 Freeport Road
Pittsburgh, PA 15215
(412) 784-4000

Office of the
President

October 21, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C.

RE: Hospital I.D. Number 390102

Dear Dr. Roper:

Thank you for the opportunity to respond to the mortality data prepared by HCFA relative to St. Margaret Memorial Hospital. Our review of the data revealed no significant errors, although we were unable to confirm all deaths stated as occurring after discharge.

Yours truly,

Stanley J. Kevish
President

SJK/dk

SAINT MARY HOSPITAL

LANGHORNE-NEWTOWN ROAD
LANGHORNE, PENNSYLVANIA 19047

(215) 750-2000

COMMENTS ON HCFA MORTALITY DATA

Saint Mary Hospital, Langhorne, Pennsylvania
Medicare Provider #390258 - October 21, 1987

The data presented by HCFA have proven impossible to replicate with our own records. There appear to be major discrepancies in total numbers and in the numbers of deaths of patients while still hospitalized. Our records indicate that over 40 deaths reported to have occurred in the hospital, actually occurred in another setting.

We do wish, however, to address the one diagnostic category, SEVERE ACUTE HEART DISEASE, for which the hospital actual mortality rate falls outside the range of the predicted mortality rate. The average age of patients in this category was 75 years. Our records show that 18% were transfers from Extended Care Facilities, an additional 27% had serious complicating diseases such as end stage Renal Disease, terminal cancer or were in cardio-pulmonary arrest immediately prior to arrival at the hospital. In most instances death was the expected outcome at the time the patient was admitted to the hospital.

These statistics do not indicate the quality of care given at Saint Mary Hospital and do not measure any hospital's performance.

Sister Clare Carty, O.S.F.
Sister Clare Carty, O.S.F.
President, Saint Mary Hospital

Suburban General Hospital
2701 DEKALB PIKE • NORRISTOWN, PA 19404 • (215) 278-2000

October 9, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

RE: Comments on HCFA Mortality Data
for Hospital #390116

Dear Dr. Roper:

The HCFA data indicates that, of a total of 933 Medicare patients whose last admission was to Suburban General Hospital in 1986, 117 died within 30 days of admission. Of these, 97 died while in the hospital and 20 died after discharge.

Our own records indicate that 1807 Medicare admissions occurred in 1986. We have no way of verifying the HCFA number of Medicare patients whose last admission in 1986 was to Suburban General Hospital.

We would also like to point out several errors in the dates of discharge/death listed in the HCFA data. The errors are listed below:

HIC#:	NAME:	AGE:	SEX:	ADMISSION:	DISCHARGE:	DATE OF DEATH:
[redacted]		075	F	05-29-86	06-05-86	06-05-86
(HCFA data lists incorrect date of death as 06-06-86)						
[redacted]		080	F	12-19-86	12-22-86	12-22-86
(HCFA data lists incorrect date of death as 12-19-86)						
[redacted]		069	F	05-13-86	05-16-86	05-16-86
(HCFA data lists incorrect data of death as 05-17-86)						

Please correct your data to reflect the above changes. The data then indicates that, of 117 total deaths, 99 occurred in the hospital and 18 occurred after discharge.

We question the inclusion in these statistics of patient deaths occurring after discharge. This has no doubt resulted in the

attribution to our hospital of deaths unrelated to the condition of the patient that was under treatment at discharge or that resulted from the management of the patient at home or in a post-acute hospital facility.

Please include these comments in the appropriate section of the December 1987 publication of the Medicare mortality data.

Sincerely,

Stanley E. Grissinger

Stanley E. Grissinger
Vice President, Operations
Suburban General Hospital

SEG/a

TAYLOR HOSPITAL
A Tradition of Caring
RIDLEY PARK, PENNSYLVANIA 19078
215 / 595 • 6000

COMMENTS ON THE HCFA MORTALITY DATA
Taylor Hospital, Ridley Park, Pennsylvania 19078

Data Verification

The data used by HCFA indicate that a total of 1,857 Medicare Patients admitted to Taylor Hospital died within 30 days of admission. Of these, 1825 died while still a patient of the hospital, while 32 died after discharge. Our own records indicate that one patient was not seen at Taylor Hospital. Three patients had the wrong discharge dates.

Unique Services at Taylor Hospital

Taylor Hospital is a community hospital whose Medicare patients represent 40 % of the total cases. In addition, it should be noted that Taylor Hospital includes among its specialties an active Oncology Unit as well as an approved Hospice program.

TAYLOR HOSPITAL
A Tradition of Caring
RIDLEY PARK, PENNSYLVANIA 19078
215 / 595 • 6000

The following cases represent incorrect data.

Patient ID Number	Incorrect Data (Discharge Date)	Correct Data
[redacted]	4/21/86	4/24/86
	10/09/86	10/13/86

Patient ID Number	Incorrect Data (Date of Death)	Correct Data
[redacted]	5/31/86	5/16/86

Patient ID Number	Incorrect Data	Correct Data
[redacted]	Not a Patient at Taylor Hospital	

TEMPLE UNIVERSITY
A Commonwealth University

Temple University Hospital

Philadelphia, Pennsylvania 19140
(215) 221-3024

'Executive Director & CEO

October 21, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
6325 Security Blvd.
Baltimore, MD 21207

Dear Dr. Roper:

We appreciate the opportunity to comment on the Temple University Hospital mortality information recently collected by the HCFA Health Standards and Quality Bureau. The raw information seems representative, although without intruding on family privacy we cannot evaluate nor validate the information completely.

Our primary reservations about the analysis relate to significant gaps in the methodology used to generate predicted ranges, most notably the lack of correction for severity of illness and socio-economic status particularly relevant for a university hospital such as ourselves; we note also that statistical predictions from small sub-sets of the information are likely to be misleading. We are most concerned about the possible misinterpretation of the small grouping of information on sepsis, wherein several patients have simply been mis-coded.

We hope that you will continue to "not recommend the use of the information by itself to make judgments about the quality of care in an individual hospital or to make comparisons among hospitals" since mortality figures alone cannot be considered to totally represent hospital quality or performance.

Sincerely,

Michael K. Uhin
Executive Director and
Chief Executive Officer

MKJ/dk

cc: Leon Malmud, M.D.

The Gettysburg Hospital

LEAH A. MAITLAND, M.D.
Medical Director

390065

Oct 24. 1987

Comments to HCFA on mortality study

Cases 1,083
deaths within 30 days (admission) 132 = 12.2 not 13%
cases 1.083
deaths in hospital. 108 = 9.9%

Leah Maitland M.D.

Note Quality of care cannot be evaluated by mortality statistics.

147 Gettys Street • Gettysburg, PA 17325 • (717) 334-2121

Thomas Jefferson University Hospital

Office of the Executive Director | Philadelphia, PA 19107

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

To Whom It May Concern:

Enclosed is Thomas Jefferson University Hospital's statement to accompany the HCFA mortality data upon publication.

If there are any questions, please call me at (215) 928-7902. Thank you.

Sincerely,

Martie Ann Polaski

Martie Ann Polaski
Assistant Executive Director

MAP/td

Enclosure

THOMAS JEFFERSON UNIVERSITY HOSPITAL

STATEMENT TO ACCOMPANY HCFA DATA

Although the new Federal data reveal no quality problems at Thomas Jefferson University Hospital, our staff will continue to perform ongoing quality reviews. Quality has always been our priority, and indepth quality review is key to maintaining the Jefferson standard. We encourage patients who have questions about quality to discuss them with doctors.

Even though the HCFA data show Jefferson in a good light, it is virtually impossible to draw firm conclusions about a hospital from mortality data. This type of information only suggests areas where more detailed review might be needed. Higher mortality rates should be expected at some hospitals, because they have more patients who are very critically ill. For instance, they may admit large numbers of Medicare patients with multiple medical problems, including cancer. That is why we, at Jefferson, submit individual cases for peer review by other doctors to assure that quality care is provided in every case.

The Federal Administration itself has acknowledged that mortality rates are not a good measure of relative quality at different hospitals. It has attempted to refine the data to take account of some factors, such as age, which may explain legitimate differences in mortality rates. However, some other important factors have still been ignored. They include how severely ill patients are at the time of admission and differences in their social and economic backgrounds which can complicate their diseases.

Jefferson staff believe that a patient should have full confidence in his or her doctor and hospital, and that such confidence can contribute to a quicker and more complete recovery from illness. Further, we agree that the public should have access to more valid information about the quality of care. We encourage all our patients and their families to raise concerns and to ask questions of their physicians and hospital staff.

TROY
COMMUNITY
HOSPITAL

100 JOHN STREET
TROY, PENNSYLVANIA 16947
717-297-2121

October 23, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Dear Sir:

The published Mortality Data for Troy Community Hospital incorrectly identifies two patients who were never admitted to Troy Community Hospital's acute care services during 1986.

The level of confidence that can be placed in the HCFA Mortality Data must be questioned given that the model does not consider all factors that influence the risk of death. Significant deviations from the predicted mortality rate could be the result of either differences in the types of patients admitted to the hospital or the differences in patient treatment. The HCFA model fails to consider a wide range of factors that have a significant impact on mortality: such factors as patients general health status, the stage of patients illness, and the attribution of factors unrelated to the condition of the patient at the time of discharge but occurring within the 30 day post-admission period.

The data will identify or suggest areas that might warrant further review. The mortality data, however, will not identify areas in which a hospital provides high or low quality care or measure hospital performance.

Appropriate assessment of hospital performance is dependent upon many variables and requires a review of quality indicators of which mortality is but one. Significant quality judgments can only be made after reviewing the information contained in a patient's medical record. Therefore, use of HCFA mortality data as a means of comparing a hospital's ability to deliver quality care is questionable.

Sincerely,

Mark A. Webster
President

MAW/pn

Tyler Memorial Hospital, Tunkhannock, PA ATTACHMENT 4

COMMENTS ON THE HCFA MORTALITY DATA
Memorial Hospital, Middletown, Anystate

Data Verification

The data used by HCFA indicate that a total of 76 Medicare patients admitted to Tyler hospital died within 30 days of admission. Of these, 61 died while still a patient of the hospital, while 15 died after discharge. Our own records indicate that ____ Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Tyler hospital is correct. Our own records also indicate that of the 76 Medicare patients who died within 30 days of admission while still an inpatient, 13 were still alive at the time of discharge. [NOTE: the hospital should submit to HCFA a corrected copy of the patient listing clearly identifying any patients mistakenly coded as dead at the time of discharge.] It is impossible to determine the percentage of the 13 patients dying after discarge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In 0 of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. After correcting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to 0. Several factors may account for this difference.

Unique Services Resulting in Higher than Average Mortality.

32% of the patients involved in this study were transferred from a nursing home. The profile of the patient who was transferred was one usually found by the nursing staff to be critically ill and requiring more sophisticated nursing and medical care then could be provided in a skilled nursing facility. (e.g. IV therapy, pulmonary toilet

Results of Prelimary Medicare Record Review.

1. Average age of patient involved in study was 80.
2. Breakdown of age groups involved:
   50 59 years 2 patients (2%)
   60-69 years 7 patients (9%)
   70-79 years 20 patients (26%)
   80-89 years 35 patients (46%)
   90-99 years 13 patients (17%)
3. 62% of the patients in this study were expected to die on admission indicated by "do not resuscitate" orders in the doctor's orders.
4. Death was not an expected outcome but was a significant possibility with 14% of the patients in this study. These patients usually sufferred from a chronic, terminal disease such as ALS.
5. Without exception, every patient had a co-morbid condition. The average amount of co-morbid conditions was 2. The most common were: ASVD, diabetes, CHF and arthritis.

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	6	1	6	1
CE -- Cerebrovascular Accidents	9	0	9	0
GC -- Gastrointestinal Catastrophes	2	0	2	0
GI -- Gastrointestinal Disease	2	0	2	0
GU -- Urologic Disease	1	0	1	0
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	3	0	3	0
HM -- Severe Chronic Heart Disease	4	3	4	3
HS -- Severe Acute Heart Disease	2	1	3	0
ME -- Metabolic/Electrolyte Disturbances	2	4	3	3
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	16	3	16	3
RN -- Renal Disease	1	0	1	0
SE -- Sepsis	2	0	2	0
TR -- Severe Trauma	1	1	1	1
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	10	2	10	2
Total -- All Categories	61	15	63	13

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

union city
memorial
hospital

October 27, 1987

William L. Roper, M.D.
Administrator
HCFA
Dept. of Health & Human Services
200 Independence Ave., SW
Washington, DC 20201

Dear Dr. Roper:

Upon reviewing the mortality data forwarded from your office, there are several observations that must be offered, especially in view of its proposed release to the public.

First and foremost, the hospital has checked for statistical accuracy and has discovered that the number of deaths reported was accurate but the number of Medicare cases reported was understated by nearly 50%. According to the hospital's records, there were 453 Medicare cases in 1986 whereas only 257 were included in your report forwarded to the hospital. Obviously, the variation in reported cases has a significant impact on the mortality rate which is a ratio or percentage. If the number of deaths is constant, an increase in the number of cases will tend to decrease the mortality rate. Although the hospital was within the expected mortality ranges, the actual rates for the various classifications should be lower.

Second the utilization of the principal diagnosis does not convey an accurate description of the patient's general state of health. In reviewing each of the 29 Medicare deaths, it was very apparent that there were significant comorbid conditions existing in all but three cases. Several were suffering from terminal illnesses, and in one instance, the patient died from a self inflicted wound despite his principal diagnosis while he was hospitalized.

Third, more than half of the patients who died within 30 days from discharge were transferred to a skilled nursing facility where death occurred. At the request of relatives, the remaining patients were not discharged to an SNF, but sent home to be cared for by a relative. It is important to note the ages of those patients, viz 100, 99, 84, and 68, all suffering from chronic and terminal conditions.

130 North Main Street Union City, Pennsylvania 16438 (814) 438-3817

In view of the above, it is apparent that the release of the data can be confusing as well as misinterpreted. Consequently, it raises a question on the objective to be achieved through its release. I certainly can understand the desire to better inform the public, but the objective does not seem attainable through this mechanism. I would respectfully suggest that your plan be reevaluated.

Sincerely,

Thomas McLoughlin (H)

Thomas McLoughlin
Executive Director

cc: Kelly M. Grotzinger

the uniontown hospital

500 W. Berkeley Street • Uniontown, PA 15401 • Telephone (412) 430-5000

William L. Roper, M.D, Administrator
Department of Health and Human Services
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

October 22, 1987

Dear Dr. Roper:

The Uniontown Hospital received the mortality information provided by HCFA on September 29, 1987. This data was reviewed for accuracy by our staff and certain corrections are necessary based on our internal information. This information is presented on the attached sheet for your review.

We at The Uniontown Hospital believe that assessment of hospital performance is dependent upon many variables and requires a look at many quality indicators of which mortality is but one.

In addition, mortality is affected by a variety of circumstances other than hospital care, such as preventive health care measures, social factors, patient compliance with physician instructions, availability and accessibility of medical care and timeliness of diagnosis and admission. Death within 30 days of a hospital admission may be completely unrelated to the hospital and physician care.

Mortality rates are also impacted by how sick patients are upon admission to the hospital. This information is not included in HCFA's development of the predicted death rate ranges for our facility. For instance, a focused analysis of the specific deaths reported for our hospital in the category of Severe Acute Heart Disease showed that:

- 63% of the patients had three or more co-existing medical problems such as Pneumonia, Congestive Heart Failure, Arteriosclerotic Heart Disease, Diabetes Mellitus, Acute Renal Failure, Stroke, Encephalopathy, Cerebrovascular Accident and Chronic Obstructive Pulmonary Disease.
- 90% of these deaths were patients who were admitted through the emergency room in acute distress at the time of admission.
- The average age of the patients who died was 77 years.

Finally, over half of the patients (63%) experienced multiple admissions prior to their death, an indicator of how severely ill they were.

A Quality Assurance Program designed to monitor and evaluate the quality of care rendered to patients of The Uniontown Hospital has been ongoing since instituted in 1980. This program follows the guidelines and regulations of the Joint Commission on Accreditation of Hospitals (JCAH). Under the Quality Assurance Program, the Medical and Hospital staffs conduct regular comprehensive peer analysis of the

clinical practices and activities within the hospital. This analysis is a planned, systematic and ongoing monitoring and evaluation of patient care to allow opportunities to improve care to be quickly and efficiently identified and addressed. As part of this review, the Medical Staff does review all deaths. Discharge planning for patients begins as soon as the patient is admitted to make sure that no patient is sent home before they are medically ready for discharge.

The Uniontown Hospital is a non-profit 230-bed facility located in Uniontown, Fayette County, Pennsylvania. Its medical staff of 116 physicians represents virtually all medical specialities and disciplines. We are primarily an acute care facility meeting the health care needs of more than 159,000 residents in Fayette County as well as residents of neighboring Greene and Washington counties and outlying communities in West Virginia and Maryland. Some 13,000 individuals, or 14.7% of the population, are over the age of 65. This elderly population is continuing to increase and it is anticipated that some 17% of the population will be over the age of 65 in 1991. In 1986, Medicare patients constituted 52.2% of our admissions.

Among the hospital's diagnostic and treatment services are a 24-hour emergency services department, outpatient/ambulatory care services department, maternity and pediatric services, radiology/nuclear medicine, cardiac diagnostics (ECG/EEG/ Echocardiography), medical laboratory services, respiratory care, laser eye surgery, physical/occupational/speech therapies, cardiac rehabilitation to include Phase I (inpatient) and Phase II (outpatient), CT Scanner technology, specialized intensive/ coronary care units, mammography and ultrasound imaging, hematology/oncology, rheumatology and neurology clinics, pharmacy, inpatient and outpatient surgery to include same day surgery, and medical social services. We are also affiliated with a Medicare certified home health care agency and a durable medical equipment company to ensure a continuum of quality health care to our patients.

The Uniontown Hospital is committed to providing community outreach programming which improves quality of life for patients and their family members who must deal with illness/injury. Among the educational and support programs offered to help persons cope with the stresses of illness/disease are: Adult Children of Aged Parents, Alzheimer's Family Support Group, Arthritis Self-Help, Cardiac Club, Culinary Hearts Kitchen Class, Diabetic Support Group, Employee Assistance Program, Diet-Free Weight Loss, FreshStart, Hypertension and Hysterectomy Clinics, I Can Cope, Lifeline, Friends of People with Special Needs, and Stroke Club.

CONCLUSION

Our hospital, Medical Staff and Governing Body are committed to providing high quality patient care, as demonstrated by our establishment of a formal comprehensive quality assurance program. We believe that our ongoing review and evaluation assures that appropriate care is provided to our patients with identified problems addressed at the proper level within the hospital. These efforts will continue with the support of our Board, hospital staff, physicians and community.

Thank you for the opportunity to comment prior to the publication of our mortality statistics.

William J. Grego, Jr.
President, The Uniontown Hospital

Riad Saradar, M.D.
President, Medical Staff

UNIONTOWN HOSPITAL

HCFA MORTALITY CORRECTED INFORMATION

Our records indicate the following five patients' date of death to be in error.

HIC#	SURNAME	DIAGNOSTIC CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH
[redacted]			72	M	05/05/86	05/16/86	05/17/86
Date of death listed as 05/17/86.			**Actual date of death 05/16/86.**				
[redacted]			080	M	08/13/86	08/13/86	08/19/86
Date of death listed as 08/19/86.			**Actual date of death 08/13/86.**				
[redacted]			070	M	10/18/86	10/19/86	10/20/86
Date of death listed as 10/20/86.			**Actual date of death 10/19/86.**				
[redacted]			075	F	05/28/86	06/05/86	06/06/86
Date of death listed as 06/06/86.			**Actual date of death 06/05/86.**				
[redacted]			081	F	05/27/86	05/27/86	05/28/86
Date of death listed as 05/28/86.			**Actual date of death 05/27/86.**				

United Community Hospital
R.D. #5 Box 5005 Cranberry Road Grove City, Pennsylvania 16127-9703 Telephone (412) 458-5442

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
Meadows East Bldg.
6300 Security Blvd.
P.O. Box 26684
Baltimore, Maryland 21207

Medicare Provider #39-0266

Dear Sir:

In response to your letter dated September 21, 1987, United Community Hospital submits the following discrepancy and comments:

Discrepancy

[redacted] listed as discharged on December 16, 1986, and expiring on January 5, 1987, was in fact readmitted on December 18, 1986, and expired in the hospital on January 5, 1987.

Comments

In reviewing the mortality data, we want to emphasize that here at United Community Hospital our determination of quality of care is based on so much more than just mortality data. We believe that the quality of our care is more accurately reflected by the monthly peer review of all clinical activities of the hospital - mortality being only one. It is this on-going review process that will indicate any potential quality problem which can be resolved immediately. We believe this process more effectively addresses quality rather than a statistical comparison of mortality data reviewed retrospectively.

At United Community Hospital, our staff recognizes the consumers' interest in securing useful, reliable information on the quality of care. We join with, HCFA as well as AHA and JCAHCO in investigating methods that evaluate quality through more comprehensive methods than segmented statistical data.

As we develop those methods, we must look at the kinds of Medicare patients treated at our hospital. Recognizing the high incidence of cancer patients, the many patients being admitted from nursing homes, and the number of chronically ill, frequently-admitted patients gives more credibility to the measurement of severity. The mortality statistic itself is of value only when the severity factors are part of the analysis. We believe that judgment on quality can be made only after reviewing all factors in each mortality case.

It is that total commitment to quality that we have made here at United Community Hospital. We believe our dual accreditation by both JCAHCO and AOA, our credentialing and peer review procedures, and on-going case review reflect that organizational commitment.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

That's why we want the public to know that we try to utilize every workable measure - not just mortality data - to provide them with the high quality they have a right to expect.

Thank you for the opportunity to review, correct and comment on your data.

Sincerely,

James R. Kelly, Jr.
Administrator

JRK/jas
Enclosure

UNIVERSITY HOSPITAL
THE MILTON S. HERSHEY MEDICAL CENTER
THE PENNSYLVANIA STATE UNIVERSITY

P.O. BOX 850 HERSHEY, PENNSYLVANIA 17033 717 531-8800

HOSPITAL ADMINISTRATION

October 21, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

ATTN: William L. Roper, M.D.

Dear Dr. Roper:

The University Hospital of Milton S. Hershey Medical Center, Pennsylvania State University, (Medicare Provider #390256), is a regional tertiary care referral center, and the only medical college in Central Pennsylvania. We offer a broad spectrum of services; comprehensive outpatient care, medical and surgical cardiology, oncology (including experimental oncology treatment), renal and cardiac transplantation and FDA approval for use of an artificial heart. The hospital is a state designated level one trauma center. Many of our patients are referred here for care not available elsewhere in Central Pennsylvania.

The case mix index for this institution was 1.5229 in 1986. This is the 8th highest in Pennsylvania and 31% higher than all other hospitals in the Central Pennsylvania region. The case mix index is a rough indicator of the complexity of illness in the patients we serve.

The HCFA data gives us an overall mortality rate which is at the low end of the predicted range, however we do have some concerns about the methodology used. The formula for predicting the individualized mortality range has not been tested for validity or reliability. Covariants in the formula include age, transfer status and selected comorbidities, but there is no assurance that these covariants are weighted in a valid or proper fashion. HCFA currently has no direct way to obtain severity of illness data which must surely have an influence on mortality rate. Many of our patients have more than four comorbidities but only four can be reported to HCFA. Therefore, the statistical computation may not be accounting for all patients with significant comorbidities. The accuracy of the comorbidity factor is questionable until all comorbidities can be accepted by HCFA.

Surgical procedures are not taken into consideration by the statistical model. We contend that a major surgical procedure in an elderly patient may be a significant factor in predicting outcome. Finally, the formula utilizes the principal diagnosis during the patient's last admission. In fact, the principal diagnosis may not reflect the major diagnosis. For example, a cancer patient admitted for chemotherapy or radiation therapy would not be included in cancer category.

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

RE: Mortality Data

The usefulness of this statistical analysis extends only to its function as a screening tool to identify areas for closer review. The quality of care rendered must then be examined on a case by case basis. The staff of University Hospital did, in fact, closely evaluate medical records from several of the diagnostic categories. We found the mortalities to be an expected outcome of the patient's illness. It must be remembered that death is not in itself an indicator of poor medical care. Rather in cases of terminal illness quality medical care may be exemplified by foregoing aggressive, but futile treatment. A death within 30-days of admission, or occurring outside the hospital may be an example of appropriate palliative care.

Predicted mortality ranges can not be considered accurate until HCFA can identify severity of illness and validate the statistical methodology. While we were certainly pleased to see the low mortality rates in relation to our predicted range, we believe that our own quality assurance activities have more relevance in identifying quality of care provided at The University Hospital, Milton S. Hershey Medical Center. Patients and purchasers of health care should use criteria other than the mortality statistics when selecting a hospital.

Sincerely,

Howard J. Peterson
Director
University Hospital

HJP:meb

WGH Medical Center
Warminster General Hospital
A Member of United Hospitals, Inc.

225 Newtown Road
Warminster, PA 18974
(215) 441-6600

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

PROVIDER # 390260
Mortality Information

To Whom It May Concern:

We are in receipt of the mortality information for Medicare patients treated at our facility in 1986. While we agree that the information may be useful, there are gross limitations in the data and it is recommended that it not be used solely to make a judgement on quality of care. In several diagnostic categories, the number of cases and deaths is such a small number that the statistics are distorted. For our particular hospital, 11 out of the 16 diagnostic categories have 50 patients or less. Also, one must keep in mind that such things as severity of illness, patients' economic and social status, and general emotional well-being, while not a part of this HCFA model, could have substantial impact on a patient's living or dying.

It should be noted that of the 1,122 beneficiaries treated at Warminster, 95% of the ones who expired were admitted as emergency cases where the patient required immediate medical intervention as a result of severe life threatening or potentially disabling conditions. Of the 148 patients that died, approximately 23% expired within the first 24 to 48 hours of admission to the hospital, further substantiating the need to be able to account for severity of illness on admission.

Of the patients that died, over 90% were admitted either from a nursing home and/or through the Emergency Room. This is important to keep in mind as the HCFA model does not account for either the acuteness or the chronicity of the diseases of these particular patients. Of patients who expired from sepsis, a high risk category, all but one was admitted from a nursing home and every case was an emergency admission.

This letter is intended to be used in conjunction with the HCFA mortality data and we ask that the above statement be taken into account before any conclusions are drawn.

Sincerely,

Kim Roberts, ART
Administrative Assistant/DRG Coordinator

KR/jac
attachment

WARREN GENERAL HOSPITAL

October 27, 1987

Dept. of Health and Human Services
Health Care Financing Administration
Washington, DC 20201

ATTN: William L. Roper, M.D.
Administrator

RE: Mortality Rates, 1986 Medicare Pts.
Warren General Hospital, Medicare Provider #390146

Dear Mr. Roper:

In reply to your letter dated September 21, 1987, we have thoroughly reviewed the mortality information you submitted to us regarding Medicare patients treated at Warren General Hospital in 1986.

We identified some discrepancies consisting mainly of incorrect admission and discharge dates for patients listed as post-discharge deaths. We also noted some incorrect principal diagnoses and Diagnostic Category assignments.

In addition, HCFA reports that a total of 1,250 Medicare patients were admitted to Warren General in 1986, and that of these, 136 died within 30 days - 102 while still inpatients and 34 died after discharge.

Also, our records indicate that 32 of the reported 136 Medicare patient deaths occurred after discharge. Verification of the status of these 32 patients was difficult since information concerning death after discharge is not included in the patient's medical record. However, for each of the 32 patients listed with a date of death after discharge, the medical records were reviewed. We were able to verify that 21 patients were discharged to a long-term care facility, and the dates of death were confirmed by those institutions. Also three patients were brought to our Emergency Department at the time of death. The remaining 8 patient deaths could not be verified.

Review of the 32 patient medical records revealed appropriate management and discharge planning. Compliance with the PRO's generic discharge screens was evident demonstrating satisfactory discharge status for care and services to be rendered safely and effectively in an alternate setting. These patients had documented long-term poor prognoses due to advanced age coupled with multiple chronic medical conditions, end-stage diseases, psychological problems and expressed desire for non-aggressive treatment. Where appropriate, arrangements were coordinated with the Hospital's affiliated Hospital Home Care Services program to provide services to patients who were discharged to their homes.

TWO CRESCENT PARK WEST • WARREN, PENNSYLVANIA 16365 • 814/723-3300

As part of our ongoing medical staff quality assurance activities, all inhouse deaths are reviewed to assess and evaluate the quality of care provided. Every death record is analyzed by a physician, and a report of the findings and recommendations is presented monthly at medical and surgical departmental meetings. All of the 102 inhouse medicare deaths were included in this process.

Mortality rates and statistics alone cannot and should not be considered a measure for determining quality of care. Because of the unique nature of each individual, patient needs are variable and dependent on the severity of medical conditions, as well as the presence of complicating or co-existing diagnoses and circumstances. Therefore, the type of services provided for one person may well differ from those provided another. The quality of care can be determined only after careful review and analysis of the individual patient's treatment as documented in the medical record.

Grouping patients into a diagnostic category based on principal diagnoses also can often be misleading. This tends to influence us to logically assume that because a patient has a specific diagnosis occasioning admission to the hospital, each patient with like diagnoses requires the same or similar resources. The degree to which the patient's needs were identified, provided and followed-up determine the quality of care provided. But this can only be realized after thorough review of each case. Statistics and mortality rates can never begin to address such variables. This sort of statistical analysis can identify potential areas for further evaluation, but such data cannot be used directly as a measure of hospital performance.

As the sole provider of health care services in a rural community, our goal is to provide the utmost in quality care to all patients regardless of financial class. We continue to strive for excellence in offering our services and plan to continue our efforts in evaluating and assessing the quality of care we provide.

Sincerely,

Alton Schadt
Executive Director

AMS:psg

THE WASHINGTON HOSPITAL

155 Wilson Avenue
Washington, PA 15301
412-225-7000

TRADITIONAL VALUES
FOR TODAY'S TIMES

October 7, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen,

The Washington Hospital has reviewed the data on mortality statistics included with your letter dated September 21, 1987.

While we wish to emphasize that quality of care cannot be measured by death rates without consideration for severity of illness and other factors specific to individual patients, we have reviewed our data and verified random samples based on dates of death and diagnostic categories. We were unable to identify errors in the data and assume that the statistics presented are as accurate as can be expected given the constraints of the methodology that was used.

Sincerely,

E.L. Strosser
President

THE WAYNE COUNTY
MEMORIAL HOSPITAL ASSOCIATION

HONESDALE, PENNSYLVANIA 18431
717-253-1300

Comments on the HCFA Mortality Data

Data Verification

The data used by the Health Care Financing Administration indicate that a total of 129 Medicare patients admitted to Wayne County Memorial Hospital (Hospital Identification #390125) died within 30 days of admission. Of this number, 99 persons died while still a patient of the hospital, while 30 died after discharge.

a. Twenty-four (24) patients died in the Hospital's Skilled Nursing Facility
b. Two (2) patients were Dead On Arrival post discharge
c. One (1) patient died after transfer to another acute care facility
d. One (1) patient died in a Scranton hospital following discharge
e. Information concerning death after discharge cannot be verified for two (2) patients

Interpretative Remarks

Each chart identified was reviewed by a physician member of the Wayne County Memorial Hospital Medical Staff to facilitate these remarks.

In the diagnostic category Gastrointestinal Catastrophe, three (3) of the eight (8) deaths reported in this category were not due to Gastrointestinal Catastrophe; i.e., the deaths were due to terminal cancer, myodcardial infarctions and cerebrovascular accident. In an additional two patients, definitive therapy was not

allowed at the request of the patients' families.

In the diagnostic category Pulmonary Deaths, chart review indicates that all deaths in this category were expected and unpreventable. Several patients actually were primarily diagnosed as terminal cancer cases, with the respiratory problem developing as a secondary problem.

In the diagnostic category Cancer, twenty (20) of twenty-two (22) deaths in this category were patients admitted with known terminal cancer. These patients received only supportive care prior to their deaths.

In the diagnostic category CVA, chart review indicates that all deaths in this category were expected and unpreventable.

Date of Death Errors

Expired 4/20, not 4/30
Expired 3/9, not 3/10
Expired 3/4, not 3/5
Expired 9/22, not 9/28

Transfer to Another Acute Care Facility (Temple)

WCMH admission transferred to Temple on 9/1/86; expired 9/4/86

Discharged from WCMH with Subsequent Admission to a Scranton Hospital

Discharged from WCMH on 6/28/86; expired 7/15/86

WAYNESBORO HOSPITAL • EAST MAIN ST. • WAYNESBORO, PA 17268

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

Re: HCFA Mortality Information
Provider #390138-CY1986

Gentlepersons:

As authorized in your 9/21/87 transmittal, we wish to make the following information known regarding Waynesboro Hospital data you provided for our review.

The validity of mortality rates presented for Waynesboro Hospital must be questioned. Although we concur in your reporting of deaths of patients within 30 days of their admission to Waynesboro Hospital, you have reported only 90% of the total 1986 Medicare admissions which by your definition should have been in the denominator of your formula, i.e., 842 patients vs. your reported 761. This figure is derived as follows:

Discharges 1/1/86-12/31/86.....		1165
Less: Readmissions	274	
Transfers	49	323
Discharges to be used in Mortality % calculations		842

A review of the two categories of patients with mortality rates reported above the expected norms discloses a high percentage of patients with terminal disease established at admission. Recognize that as we have no active staff physicians who are specialists in pulmonary or renal disease, good prognosis candidates for aggressive management with these primary diagnoses will be transferred to appropriate medical facilities.

We appreciate the opportunity to offer these clarifications of this data.

Sincerely,

William G. George
President

West
Park
Hospital

Ford Road and Fairmount Park, Philadelphia, PA 19131 215/578-3400

October 23, 1987

William L. Roper, M.D.
Department of Health and Human Services
Health Care Financing Administration
The Administrator
Washington, DC 20201

Dear Dr. Roper:

This is in response to your letter of September 21, 1987. We have reviewed the statistics concerning our hospital and have the following comments to be included in your publication of mortality information. West Park Hospital services several nursing homes which frequently refer debilitated septic patients. The average age of the listed patients is 83.4 years with a mode of 87 years and a median of 83.5 years. Of the 13 cases in the categories of urosepsis and sepsis, nine were referred from nursing homes. Because of the high nursing home population, we feel that our results are skewed above the median for these categories.

Sincerely,

Gordon B. Fink, M.D.

GBF/msu

4800 Friendship Avenue
Pittsburgh, PA 15224
(412) 578-5000

WEST PENN
HOSPITAL

(412) 578-5000

Friends for life.

Mr. William L. Roper, M.D.
The Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Mr. Roper:

The mortality rate report submitted by HCFA was reviewed by The Western Pennsylvania Hospital's quality review department and medical staff. The Western Pennsylvania Hospital's mortality rate is within the predicted mortality range for all diagnostic categories. We observed from the data that two of the diagnostic categories have a 0% mortality rate; one diagnostic category has a mortality rate which falls below the predicted range; four diagnostic categories have a mortality rate at or below the 25th percentile within their predicted range; and three diagnostic categories have a mortality rate at or below the 50th percentile within their predicted range. In total, 10 out of the 16 diagnostic categories have mortality rates which fall at the midpoint of or below the predicted range. None of the mortality rates fall above the predicted ranges.

In support of this observation, we offer the following points:

. For the low risk heart disease category, The Western Pennsylvania Hospital's mortality rate falls at the upper level of the predicted mortality range. A detailed review of the patients' records revealed the majority of them, when admitted to The Western Pennsylvania Hospital, were at a point in the disease process which required referral to a tertiary care facility for therapeutic intervention such as heart catheterization, percutaneous translumenal angioplasty, and/or open heart surgery.

. Another contributing factor was the patients' advanced age (average 78 years) of the patients who were medically managed. Upon further review, we found that although these patients were grouped in the low-risk heart disease category, they were actually in the end stages of that disease process, with other comorbid conditions that further compromised the patient's overall health status.

. It is important to note, however, that our mortality rate for severe chronic heart disease (heart failure) is well within the predicted mortality range, and the mortality rate for severe acute heart disease (heart attacks, ruptured aneurysms and potentially fatal heart rhythms), is below the predicted mortality range.

We noticed some additional findings when reviewing patients' charts. First, deaths that occurred within 30 days of admission, but after discharge from the hospital, seemed to have little relation to the patient's last hospitalization. When discharged from The Western Pennsylvania Hospital, the patients were as stable as could have been expected. Second, several of the patients on our report were admitted for an acute condition resulting from an underlying disease such as cancer or heart disease. The acute condition was appropriately treated, however because of the underlying disease's stage, the patient's prognosis could not be reasonably altered. For example, patients were admitted to the hospital with a principal diagnosis of pneumonia. When actually, their debilitated physical condition caused by cancer, made them prone to infections such as pneumonia.

In summary, we feel it is important to note that the mortality rates are not the only measures of hospital quality performance. Quality of care is related to the appropriateness of the care provided, consistent with the standards of good medical practice and the needs of the patient, which is best determined by focused and ongoing medical record review. The quality review program at The Western Pennsylvania Hospital will continue to assess the patient care delivered by our hospital to determine where opportunities for improvements exist and take appropriate action when indicated.

Thank you very much for the opportunity to comment on the data you prepared for The Western Pennsylvania Hospital.

Sincerely,

Steven A. Caywood

Steven A. Caywood
President and Chief Executive Officer

SAC/mg

WESTMORELAND HOSPITAL ASSOCIATION

MEMORANDUM

TO: William Roper, M.D.
HCFA

DATE: October 27, 1987

FROM: Carol Bucci-Shiffer, J.D., M.H.A.
Assistant Executive Director
Westmoreland Hospital Association

SUBJECT: Hospital Response to HCFA Mortality Data

Westmoreland Hospital is committed to providing quality patient care through combined technology, trust, state-of-the-art equipment, and expert caring staff. Because of this, a thorough review of the HCFA Medicare Mortality data was done by the physicians and staff.

First, it should be noted that Westmoreland Hospital's mortality rates for all diagnostic categories were well within acceptable ranges for the Medicare age population (65 years and older). The hospital's average Medicare patients' age at death was 76 years old. A review of all the mortality cases revealed the following:

1) In all cases, the care rendered by the hospital and physicians was appropriate.

2) Twenty-three percent of the cases reviewed showed the diagnostic categories assigned by HCFA as the cause of death to be inappropriate and inaccurate. For example, HCFA indicated there were four deaths within orthopedic disorders. Upon review, the actual causes of death were: one from cerebrovascular accident, one from cancer, one from pulmonary disease, and one from heart disease. Similarly, of the 32 metabolic/electrolyte disturbance deaths, 16 were terminal cancer patients. Unfortunately, this skewing of the data reduces its credibility and therefore its usefulness.

3) Westmoreland Hospital, because it is a referral hospital for cancer, renal dialysis, and trauma, treats more seriously ill patients than the average community hospital. It is to Westmoreland Hospital's credit that, in light of their more seriously ill patient population, they have maintained a favorable mortality rate.

4) Based on reviews of patient medical records, of the total Medicare deaths, 80% were admitted to the hospital terminally ill and 98% of those patients who died post-discharge had a known bleak prognosis.

5) Since Westmoreland Hospital has an active outpatient hospice program, there is an aggressive referral of patients who need terminal care. These patients are admitted as a regular patient to the hospital and contribute to the hospital's overall mortality rate.

We appreciate the opportunity to comment on this and other data which may be released by your organization.

CBS:jk

WBGH
A COMPLETE HEALTH CARE CENTER

Wilkes-Barre General Hospital

N. River and Auburn Streets • Wilkes-Barre, PA 18764
(717) 829-8111

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Please find enclosed the Wilkes-Barre General Hospital's commentary and data validation the HCFA Mortality which was sent to our facility on September 21, 1987. There are two attachments:

ATTACHMENT 1 — The Hospital's commentary on Mortality Data for Publication, and;

ATTACHMENT 2 — Itemized listing of inconsistencies on the Validation of Data. This attachment should not be published.

Thank you for your attention in this matter.

Sincerely,

Allan E. Atzrott, FACHE
President

AEA:jh

Enclosures

ATTACHMENT 1

COMMENTARY FOR PUBLICATION

The Wilkes-Barre General Hospital is a 440 bed tertiary care facility providing the widest range of services in the Wyoming Valley. Primary services include: Cancer Center including Radiation Oncology; Renal Dialysis Center; Open Heart Surgery; Laser Surgery; MRI; Teaching Center Family Practice Residency Program; and 24 hour Emergency Room Coverage.

The Hospital is approved by the Joint Commission on Accreditation of Hospitals. The Medical Staff is comprised of 284 physicians representing over 32 specialities. The Wilkes-Barre General Hospital is committed to the delivery of quality care to the community it serves. This commitment is evidenced by the activity of the Medical Staff and allied health professionals through an on-going Quality Assurance Program. One of the many components of this program is mortality review. Each death occuring in the hospital is reviewed by the Medical Staff considering anticipated death, complications, appropriate treatment and cause of death. Results of this review are tabulated and reported to the Medical Executive Committee, Hospital Administration and the Board of Directors. This mechanism of mortality review provides only one of many vehicles Wilkes-Barre General Hospital utilizes for evaluating the quality of care provided and serves as a means for continual improvement as a result of education, purchase of new equipment and addition of new services.

Promoting consumer awareness of hospital mortality data is a laudable goal providing the data is reliable, accurate and the interpretation can be readily understood by the general public. Raw mortality figures can be misleading without adjustment for important variables such as severity of illness. The HCFA methodology does not account for severity and intensity thus resulting in a wide potential for erroneous results. The HCFA mortality data may be the first step to focusing on areas for further review. Under no circumstances can only mortality data be the basis for determining the quality of care that a hospital delivers. Hospitals above the predicted ranges do not always provide the poorest care, nor do Hospitals below the range provide the best care.

HCFA analysis rests on the assumption that all the patients admitted to all hospitals are similar in the severity of their illness except for the few specific characteristics: age, sex, prior hospitalization, some complicating conditions and transfer status. It is further assumed that all the patients in each category received similar or average treatment. The statistical methodology utilized to compile the data is sound, however, the important question is whether the above assumptions are valid. It is well documented that this model does not consider some of the most important factors that

influence the risk of death and, only predicts the chance of death. More conclusive considerations for predicting death along with severity of illness would be whether the death was expected on admission (i.e., patients with a terminal illness) and the actual cause of death. The actual "cause" of death was not utilized. in this model.

The reliability of Data Processing routines used to identify post discharge deaths is unknown thus significant errors in discharge disposition could result in a higher mortality rate. Also there were no thresholds established to determine the number of patients which would qualify as being a "representative" sample. Using this statistical method too few patients in any one category can result in unreliable data.

The model also includes mortalities which occurred after the patient was discharged from the hospital within 30 days of the admission. The model does not consider that these deaths may be attributable to factors unrelated to the hospital admission, i.e. accidents, other comorbid conditions, expected death in terminal diseases such as cancer, end stage renal disease, and/or mortality related to treatment at home or in an extended care facility.

There are also certain factors that may cause a hospital to have higher mortality rates: Specialized services (cancer and renal centers, burn, hospice and trauma units, tertiary referral centers) and; area shortage of nursing home beds causing patients to be admitted to a hospital in a terminal state.

The data used by HCFA indicate that a total of 3834 Medicare patients admitted to Wilkes-Barre General Hospital, 397 died within 30 days of admission. Of these, 319 died while still a patient of the hospital, 78 died after discharge. Our own records show that 6,517 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Wilkes-Barre General Hospital is correct. It is impossible to determine the accuracy of the 78 patients who were reported by HCFA as dying after discharge. We have been able to verify that: there is no record of one (1) of these patients being treated at the Wilkes-Barre General Hospital in 1986; three (3) patients included were in fact treated at the Wilkes-Barre General Hospital after the date of death listed by HCFA; one (1) patient had an erroneous discharge date and the patient did die in the hospital; and five (5) patients listed died in the hospital on subsequent admissions. Once again the status of the remaining 67 patients cannot be verified by our records and several may in fact be alive.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of all the diagnostic or other data used in the anaylsis.

In the 16 diagnostic categories, the hospital's actual mortality rate falls well within the range of the predicted mortality rate. In an effort to cooperate with the publication of this information the Wilkes-Barre General Hospital has provided this commentary to HCFA along with a listing of data which cannot be validated with our own in-hospital statistics. A summary of these inconsistencies includes: fifteen (15) HIC numbers, (patient identification number for Medicare); nineteen (19) ages; eighty-nine (89) principal diagnoses; four (4) principal procedures; three (3) patients with no record of treatment at the Wilkes-Barre General Hospital; three (3) dates of death; and one (1) date of discharge.

Probably one of the most important factors of all is that this model's ability to detect differences in quality has never been evaluated. HCFA is most assuredly aware of the shortcomings of the data and methodology, and has committed themselves to work with hospitals to validate data. The Wilkes-Barre General Hospital, likewise, acknowledges their commitment to public accountability for the quality of care it delivers to its community.

The Williamsport Hospital & Medical Center

CHARLES J. STOCKWELL
Chairman of the Board

DONALD R. CREAMER
President

777 Rural Avenue Williamsport, PA 17701-3198 • 717/321-1000

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

SUBJECT: Request for Publication of Comments

Dear Dr. Roper:

Enclosed please find the comments of The Williamsport Hospital & Medical Center relative to the publication of actual and predicted rates of mortality for Medicare patients admitted to The Williamsport Hospital & Medical Center during calendar year 1986.

We are herewith requesting that these comments be published in conjunction with the release of that mortality data and further request that the comments be published in their entirety, without the editing or redaction of any parts thereof.

Thank you for your attention to this matter.

Sincerely,

Donald R. Creamer
President

DRC/crw
enclosure

THE WILLIAMSPORT HOSPITAL & MEDICAL CENTER COMMENTS
HEALTH CARE FINANCING ADMINISTRATION
MORTALITY STATISTICS

The release of general predicted rates of mortality as well as specific rates of mortality for certain diagnostic categories for Medicare patients discharged during the calendar year 1986 is problematic from the viewpoint of the Hospital inasmuch as we are unable to replicate and/or confirm the raw data proposed for release. The data methodologies which have been developed by HCFA are sufficiently complex as to place an enormous burden on providers to undertake a futile attempt to review existing hospital data sources in an attempt to approximate the HCFA models. Furthermore, HCFA data relies on data provided by the fiscal intermediary for the Medicare program from data sources which were not intended for the type of data compilation relied upon by HCFA, i.e., Mortality data, purportedly obtained through the Social Security Administration is not available for hospital review and cannot be confirmed by data available through hospital sources.

It should be noted that, according to the mortality statistics released by HCFA, at least 29% of deaths theoretically "attributable" to The Williamsport Hospital & Medical Center occurred <u>following</u> the patient's discharge from the Hospital. Despite our vigorous attempts to do so, we have been unsuccessful in confirming many of these deaths.

Hospital medical records indicate that, of the remaining deaths, several patients contained in the HCFA listing were alive at the time of discharge from the Hospital. Additionally, at least one patient listed was never a patient of the Hospital and is not found in Hospital records.

Moreover, 33% of the patients who died at the Hospital had a length of stay of two days or less. A brief review of the medical records of these patients indicates that many were admitted to the Hospital through the Emergency Room, having received advanced life support services on a pre-hospital basis. In many cases, had it not been for advanced life support services, patients would not have survived to be admitted and would have been pronounced dead on arrival in the Hospital's Emergency Department.

This group of patients has a significant impact on the mortality data for the Hospital because we are the contract hospital for advanced life support services and basic life support services for the City of Williamsport and provide in excess of 60% of advanced life support and emergency room services within Lycoming County.

Several other programs and services provided by the Hospital have a disproportionate effect on the mortality rate for Medicare patients. For example, the Hospital operates a Medicare exempt Comprehensive Rehabilitation Program which services a disproportionately high percentage of Medicare cerebrovascular accident patients. Acute care hospitalization needs for these patients or further cerebral compromise of these patients during the comprehensive rehab program requires admission to the acute care facility and subsequent mortality would be included in the rate for the acute care facility. Further, the North Central Pennsylvania service area from which the majority of the patients originate has a high rate of vascular disease within the general population.

Another program and service offered by the Hospital, potentially affecting our mortality rate is the Hospital's regional Heart & Lung Center. This referral facility treats a large number of chronic and acute cardiac and pulmonary disease patients, again from a regional population with a high rate of cardio-pulmonary disease.

A review of the principle diagnosis data provided for individual patients gives rise to questions concerning the accuracy of the fiscal intermediary data relied upon by HCFA. In several cases, incorrect principle diagnosis information is listed, thereby placing the patient in an inappropriate diagnostic category and rendering the mortality rate incorrect. Further, based upon a review of a number of medical records, the principle diagnosis, while correct, was not necessarily the cause of death of the patient either on an inpatient or outpatient basis. This inaccuracy causes potentially misleading information regarding the Hospital's rate of mortality within the various diagnostic categories because of the incomplete application of information relating to the actual cause of the patient's death.

The Hospital believes that the publication of raw data without qualifying information or quality indicia is misleading. The Williamsport Hospital & Medical Center strives to maintain a comprehensive Quality Assessment Program focused at the identification of potential areas of clinical deficiency and the development of activities designed to assure, to the extent possible, that patients receive services of the highest quality possible in a manner deemed prudent by the Medical Staff, Hospital Administration and the community as a whole.

Despite a questionable methodology and data replete with inaccuracy, the appropriateness of the Hospital's Quality Assessment activity is demonstrated graphically in the Hospital's mortality rates, all of which fall within the predicted range for the selected diagnostic categories reviewed by HCFA. Moreover, the Hospital's general mortality rate falls below the mean predicted mortality rate even though the Hospital's case mix index is 1.20644, reflecting a patient population significantly more acute than the general population of Medicare patients anticipated by the HCFA rate setting methodology.

The Williamsport Hospital & Medical Center

CHARLES J. STOCKWELL
Chairman of the Board

DONALD R. CREAMER
President

777 Rural Avenue Williamsport, PA 17701-3198 • 717/321-1000

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

SUBJECT: Request for Data Correction

Dear Dr. Roper:

The Williamsport Hospital & Medical Center has attempted to review and confirm the patient data provided in support of HCFA's calculation of mortality rates for Medicare patients admitted to our institution during calendar year 1986. We have had an extremely difficult time in confirming this information and, in many cases, have been unsuccessful in doing so, particularly as related to confirming the deaths of patients purported to have expired after discharge. In fact, in the category of cancer deaths, the Hospital's Tumor Registry has confirmed only 10 of the 16 outpatient deaths listed.

Please be advised that the following data has been confirmed as **inaccurate**:

[redacted] Diagnostic Category GI was not a patient at The Williamsport Hospital & Medical Center.

[redacted] Diagnostic Category GU is listed as having expired in the Hospital. Hospital records indicate that this patient was discharged alive.

[redacted], Diagnostic Category HS is listed as having expired in the Hospital. Hospital records indicated that this patient was discharged alive.

[redacted], Diagnostic Category CA is listed as having expired in the Hospital. Hospital records indicate that this patient was discharged alive.

The following patients are categorized with incorrect principal disagnosis information resulting in the change of two patients to another Diagnostic Category:

[redacted] listed as 434.0 - should be 342.9, resulting in a category change of CE to UN.

[redacted], listed as 342.9 - should be Diagnostic Code 425.4, resulting in the category change of UN to HM.

In several cases, incorrect dates of hospitalization are listed. They are as follows:

[redacted] listed by HCFA as discharge date 01/18/86 was readmitted to the Hospital 01/20/86 through 01/31/86. The Diagnosis Code for the last admission was 197.7, the Diagnostic Category would remain the same as does the date of death.

[redacted], listed by HCFA as discharged 01/30/86 was readmitted 02/07/86. The Diagnosis Code for the last admission was 496, the date of death remains the same.

In another situation, an inaccurate date of death, according to Hospital records, is listed.

[redacted] in the Diagnostic Category CE lists a date of death of 07/18/86. The date should be 07/11/86.

We request that these corrections be incorporated into The Williamsport Hospital & Medical Center specific data prior to the release of the mortality rates and that those rates be recalculated based upon these corrections.

Sincerely,

Donald R. Creamer
President

DRC/crw
cc: Kelly Grotzinger/HAP

Puerto Rico

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
AGUADILLA REGIONAL HOSP AGUADILLA PR 00603	PR-7 *	621	16	8-15	19	21	4-40	41	41	14-41	19	21	5-40	46	26	10-33	21	33	17-56	15	13	6-49	102	17	10-27
ARECIBO DISTRICT HOSP ARECIBO PR 00612	PR-8 *	1295	22	8-15	28	11	7-38	61	48	16-39	63	37	7-28	101	25	12-28	61	67	25-51	16	13	3-42	145	25	13-28
AUXILIO MUTUO HOSP HATO REY PR 00919	PR-9 *	2986	10	9-15	163	15	15-32	101	29	21-40	75	17	10-31	147	12	17-32	94	32	30-51	56	13	8-31	298	19	13-25
BARRANQUITAS HEALTH CENTER BARRANQUITAS PR 00618	PR-10 *	21	5	1-30	.	.		.	.		.	.		1	0	0-98	.	.		2	50	0-91	3	0	1-81
BELLA VISTA HOSP MAYAGUEZ PR 00708	PR-11 *	1258	12	7-14	86	17	13-34	42	33	14-41	16	31	2-39	57	25	12-33	55	58	25-51	16	31	3-42	183	22	12-25
CAROLINA AREA HOSP CAROLINA PR 00630	PR-12 *	1067	17	7-14	22	23	5-38	42	45	16-44	21	14	4-37	72	26	11-31	37	46	21-52	17	35	4-43	169	31	11-25
CASTANER GENERAL HOSP CASTANER PR 00631	PR-13	195	11	5-15	4	50	5-79	4	50	4-77	2	0	0-92	8	25	5-60	2	50	2-90	3	33	0-84	38	11	7-33
CAYEY HEALTH CENTER CAYEY PR 00633	PR-14 *	53	9	2-19	.	.		.	.		.	.		2	0	1-89	1	0	1-97	1	0	0-99	7	0	2-59
CLINICA OR PEREA MAYAGUEZ PR 00708	PR-15 *	6	17	1-62	.	.		1	0	0-97	.	.		.	.		.	.		.	.		.	.	
CLINICA OR PILA PONCE PR 00731	PR-16 *	805	12	6-13	19	21	7-44	37	22	14-43	13	31	5-49	47	34	11-35	20	45	18-59	19	5	3-39	84	20	10-28
CLINICA ESPANOLA INC MAYAGUEZ PR 00709	PR-17 *	626	12	10-18	22	45	14-52	50	20	18-44	14	7	8-52	41	12	14-41	13	31	18-68	7	0	1-59	92	29	16-35
CLINICA ONCOLOGICA PONCE PR 00731	PR-18 *	306	13	14-25	133	19	18-37	1	0	1-97	3	33	4-84	1	100	1-97	.	.		.	.		3	0	0-85
DE DIEGO HOSP SANTURCE PR 00910	PR-19 *	471	9	6-14	11	0	3-50	13	23	10-57	7	57	4-62	28	29	9-39	22	23	19-58	25	8	5-37	43	19	9-34
DEL MAESTRO HOSP HATO REY PR 00919	PR-20 *	1223	10	7-14	73	18	11-33	39	31	16-45	24	13	7-40	46	22	11-35	54	31	26-53	16	19	4-44	143	21	10-25
DOCTORS HOSP SANTURCE PR 00910	PR-21 *	671	7	4-11	35	9	10-39	27	30	12-44	15	20	4-43	12	8	7-54	9	33	11-68	5	20	1-68	41	37	9-34
DR EDUARDO GARRIDO MORALES CAGUAS PR 00625	PR-22 *	1190	24	8-15	32	34	9-39	36	61	13-42	52	27	7-30	48	17	10-34	67	60	24-48	16	25	3-41	169	43	12-26
DR GUBERNS HOSP FAJARDO PR 00648	PR-23	344	7	5-14	12	33	7-54	14	14	8-52	6	17	3-66	12	8	7-53	8	0	10-68	8	13	3-58	21	24	8-44
DR I GONZALEZ MARTINEZ ONC HATO REY PR 00919	PR-24 *	627	13	14-22	356	18	18-32	1	0	1-97	4	25	3-77	3	33	3-84	1	0	2-98	1	0	2-98	11	18	6-54
DR RAMON RUIZ ARNAU BAYAMO BAYAMON PR 00619	PR-25 *	1061	18	8-15	49	27	9-34	25	44	13-48	46	30	8-32	80	25	15-34	47	45	23-51	9	11	2-53	101	36	12-30
DRES HERMANOS YORDAN RIO PIEDRAS PR 00935	PR-26 *	36	6	4-27	.	.		.	.		.	.		.	.		9	0	13-69	1	100	0-99	3	33	0-82
EL BUEN PASTOR ARECIBO PR 00612	PR-27 *	15	13	2-38	.	.		.	.		.	.		1	0	0-98	1	0	1-97	.	.		2	0	0-91
FAJARDO SUB REGIONAL HOSP FAJARDO PR 00648	PR-28 *	742	13	7-14	21	33	9-46	18	22	9-48	11	9	8-57	47	28	12-36	22	68	19-58	25	40	8-43	75	16	11-30
FONT CLINIC CAYEY PR 00633	PR-29 *	617	6	7-14	14	7	6-50	19	21	12-51	6	17	4-68	30	13	13-45	14	36	22-71	8	13	5-62	54	9	11-34
FONT MARTELLO HOSP HUMACAO PR 00661	PR-30 *	545	8	6-14	11	36	4-52	27	19	14-48	18	17	4-39	25	16	9-41	13	38	18-67	7	0	2-60	58	12	9-30
GUAYAMA AREA HOSP GUAYAMA PR 00654	PR-31 *	578	16	8-16	22	23	7-41	34	41	13-42	9	33	4-56	56	32	13-35	33	58	24-57	8	0	1-56	44	25	11-36
GUAYNABO HEALTH CENTER GUAYNABO PR 00657	PR-32 *	84	5	5-20	.	.		.	.		.	.		6	0	3-65	.	.		8	13	3-59	24	8	7-38

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
AGUADILLA REGIONAL HOSP AGUADILLA PR 00603	8	25	3-61	8	25	6-64	1	0	0-99	.	.		92	9	1-10	18	6	0-34	11	0	0-99	42	2	1-16	6	0	0-100
ARECIBO DISTRICT HOSP ARECIBO PR 00612	28	36	7-44	24	79	20-59	47	6	2-20	1	0	0-100	161	8	1-8	98	1	0-13	45	2	0-44	103	18	1-10	42	0	0-25
AUXILIO MUTUO HOSP HATO REY PR 00919	123	13	10-36	32	50	21-56	60	8	3-19	152	1	0-6	377	5	4-10	131	2	1-11	46	0	0-35	271	4	3-9	138	1	0-6
BARRANQUITAS HEALTH CENTER BARRANQUITAS PR 00618	.	.		.	.		.	.		.	.		1	0	0-100	2	0	0-98	.	.		1	0	0-100	.	.	
BELLA VISTA HOSP MAYAGUEZ PR 00708	8	25	3-61	5	20	7-77	20	0	2-32	16	0	0-99	209	3	2-9	119	2	0-12	21	0	0-99	69	1	1-12	47	2	0-20
CAROLINA AREA HOSP CAROLINA PR 00630	12	17	6-56	23	74	17-56	14	14	2-39	60	0	0-28	129	7	1-9	63	2	0-18	13	0	0-99	154	7	2-9	16	0	0-74
CASTANER GENERAL HOSP CASTANER PR 00631	1	0	0-97	1	100	2-98	.	.		.	.		21	0	0-28	14	14	1-38	2	0	0-100	12	17	0-46	9	11	0-86
CAYEY HEALTH CENTER CAYEY PR 00633	3	0	1-83	.	.		.	.		.	.		7	14	0-82	3	0	0-92	3	0	0-100	2	50	0-99	1	0	0-100
CLINICA DR PEREA MAYAGUEZ PR 00708	1	0	2-98	.	.		.	.		.	.		2	50	0-97	.	.		1	0	0-100	1	0	0-100	.	.	
CLINICA DR PILA PONCE PR 00731	3	33	1-82	6	50	10-76	9	22	1-50	63	0	0-29	93	4	1-11	32	0	0-23	8	0	0-100	83	11	1-12	24	0	0-35
CLINICA ESPANOLA INC MAYAGUEZ PR 00709	10	10	8-63	.	.		6	0	1-62	7	0	0-100	114	0	1-10	28	14	1-24	5	0	0-100	62	2	2-16	18	0	0-52
CLINICA ONCOLOGICA PONCE PR 00731	.	.		.	.		.	.		.	.		16	0	1-34	13	0	0-45	1	0	0-100	.	.		1	0	0-100
DE DIEGO HOSP SANTURCE PR 00910	7	14	6-68	1	100	0-97	1	100	0-98	12	0	0-99	56	4	1-15	42	0	0-22	16	0	0-96	46	4	1-15	6	0	0-96
DEL MAESTRO HOSP HATO REY PR 00919	13	0	3-50	5	40	11-81	20	10	2-32	26	0	0-90	156	4	2-10	89	3	1-13	28	0	0-91	128	5	2-9	42	2	0-19
DOCTORS HOSP SANTURCE PR 00910	.	.		2	50	2-90	16	0	1-35	131	0	0-9	56	4	1-14	37	3	0-20	12	0	0-100	31	6	0-20	48	0	0-24
DR EDUARDO GARRIDO MORALES CAGUAS PR 00625	22	27	5-45	32	91	15-49	18	0	1-32	47	0	0-50	145	6	1-9	32	9	0-23	22	0	0-99	123	9	1-9	18	0	0-76
DR GUSERNS HOSP FAJARDO PR 00648	2	0	0-91	2	50	4-92	.	.		10	0	0-99	64	3	2-14	59	2	0-16	3	0	0-100	26	0	1-23	2	0	0-100
DR I GONZALEZ MARTINEZ INC HATO REY PR 00919	2	0	1-90	.	.		2	0	0-92	.	.		41	5	1-17	42	2	1-19	12	0	0-100	11	0	0-46	3	0	0-100
DR RAMON RUIZ ARNAU BAYAMO BAYAMON PR 00619	6	50	6-72	20	70	13-53	30	7	2-25	43	0	0-55	126	7	2-10	84	6	1-13	8	0	0-100	99	7	2-11	43	5	0-22
DRES HERMANOS YORDAN RIO PIEDRAS PR 00935	.	.		.	.		.	.		9	0	0-100	2	0	0-100	.	.		.	.		8	0	0-63	.	.	
EL BUEN PASTOR ARECIBO PR 00612	.	.		1	0	2-98	.	.		.	.		5	20	0-90	.	.		.	.		2	50	0-99	.	.	
FAJARDO SUB REGIONAL HOSP FAJARDO PR 00648	13	15	5-54	3	67	7-89	6	17	0-64	46	0	0-47	92	10	2-12	50	8	1-18	8	0	0-100	89	9	1-11	13	8	0-71
FONT CLINIC CAYEY PR 00633	7	0	6-68	3	33	5-85	1	0	0-100	24	0	0-83	116	3	2-12	59	3	1-16	7	0	0-100	97	0	2-11	14	0	0-37
FONT MARTELLO HOSP HUMACAO PR 00661	3	33	1-82	8	25	11-70	6	0	1-62	22	0	0-87	74	0	1-12	20	0	0-31	8	0	0-97	110	5	2-10	17	0	0-63
GUAYAMA AREA HOSP GUAYAMA PR 00654	2	50	0-91	.	.		.	.		.	.		83	5	1-12	51	0	0-19	12	0	0-71	54	6	1-14	8	0	0-95
GUAYNABO HEALTH CENTER GUAYNABO PR 00657	.	.		.	.		.	.		.	.		7	0	0-65	.	.		.	.		1	0	0-100	2	0	0-100

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Oisease			Metabolic & Electrolyte Oisturbances			Pulmonary Oisease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HATO REY COMMUNITY HOSP HATO REY PR 00919	PR-33	673	4	4-11	29	14	13-46	18	17	11-51	14	7	3-43	15	20	5-45	11	27	13-65	6	0	0-66	50	8	8-30
HOSP OE LA CONCEPCION SAN GERMAN PR 00753	PR-34 *	1195	16	10-17	67	22	13-36	61	25	19-43	40	28	6-31	102	29	15-32	45	27	23-52	28	18	8-40	146	26	16-31
HOSP OR DOMIQUEZ HUMACAO PR 00661	PR-35 *	504	7	5-13	14	7	6-50	10	30	9-61	14	29	5-48	16	31	7-46	14	50	15-62	4	50	3-77	54	11	9-31
HOSP OR SUSONI INC ARECIBO PR 00613	PR-36 *	166	9	4-14	3	0	3-83	7	29	5-65	5	60	4-71	5	0	2-68	1	0	1-97	3	67	1-81	12	8	4-49
HOSP OR TITO MATTEI YAUCO PR 00768	PR-37 *	405	15	7-15	6	17	4-67	18	28	11-51	7	43	5-65	17	29	7-45	32	44	23-56	3	33	0-83	39	28	8-33
HOSP HERNANDOS MELENOEZ BAYAMON PR 00619	PR-38 *	1161	9	7-13	37	19	8-36	49	27	15-41	12	25	4-50	42	24	10-34	42	45	24-53	20	20	4-39	144	18	13-28
HOSP MATILDE BRENES BAYAMON PR 00619	PR-39 *	564	7	5-13	23	13	8-42	6	0	4-67	18	39	5-43	32	19	11-40	1	0	2-98	8	38	2-57	54	15	11-34
HOSP SAN CARLOS BORROMEO MOCA PR 00716	PR-40 *	635	11	7-15	12	25	7-55	24	33	12-47	4	25	0-79	50	16	11-35	13	46	17-67	10	20	2-51	134	19	11-27
HOSP SAN CRISTOBAL PONCE PR 00644	PR-41 *	667	12	8-16	23	13	10-46	44	34	15-41	9	22	4-57	73	21	13-33	25	48	19-56	17	18	2-39	78	19	9-27
HOSP SAN MIGUEL INC UTUADO PR 00761	PR-42 *	32	3	1-23	1	0	0-99	1	0	1-97	.	.		1	0	0-97	.	.		1	0	0-100	5	20	1-68
HOSP SAN RAFAEL CAGUAS PR 00625	PR-43 *	1066	6	7-14	47	17	11-37	28	18	15-48	17	24	6-45	138	14	15-30	23	22	17-54	19	0	7-45	93	8	9-27
HOSPITAL WILMA N VAZQUEZ VEGA BAJA PR 00764	PR-44	528	5	7-15	6	0	5-68	12	33	9-57	12	0	4-49	23	22	11-46	15	27	18-64	6	33	6-71	82	4	9-27
HUMACAO AREA HOSP HUMACAO PR 00661	PR-45 *	407	12	6-15	8	13	2-55	13	15	9-55	22	18	4-36	38	18	11-38	12	17	15-65	7	29	1-59	53	19	9-31
INSTITUTO OFTALMICO OE PUE SAN JUAN PR 00901	PR-46 *	275	0	0-59	.	.		.	.		.	.		.	.		1	100	2-98	.	.		.	.	
LAFAYETTE HOSP ARROYO PR 00615	PR-47 *	336	4	6-14	5	20	4-71	5	60	6-75	2	50	1-89	20	5	9-45	4	75	9-84	9	11	6-60	45	2	10-34
MANATI AREA HOSP URB ATENAS MANATI PR 00701	PR-48 *	1391	11	7-14	25	24	7-39	27	37	11-44	15	20	2-40	81	23	14-32	56	50	25-52	29	17	4-34	210	18	12-25
MAUNABO MUN HOSP MAUNABO PR 00707	PR-49 *	7	14	2-59	.	.		.	.		.	.		1	0	0-98	1	100	2-98	.	.		1	0	0-97
MAYAGUEZ MED CTR MAYAGUEZ PR 00708	PR-50 *	1086	16	8-15	104	24	11-30	18	72	11-50	26	23	8-40	67	21	11-31	74	30	24-47	17	47	3-41	107	34	9-26
MENNONITE GEN HOSP INC AIBONITO PR 00609	PR-51 *	683	10	6-14	21	19	7-43	21	29	11-49	11	18	2-47	17	6	10-50	29	34	20-55	5	20	4-71	69	30	13-34
METROPOLITAN HOSP RIO PIEDRAS PR 00922	PR-52 *	1396	10	6-12	101	35	12-32	28	32	13-46	28	4	5-34	33	24	11-39	37	38	24-56	18	17	8-47	115	17	10-26
MIMIYA HOSP SANTURCE PR 00909	PR-53 *	574	3	0-9	7	29	2-60	.	.		3	33	3-83	8	13	5-60	3	33	7-88	4	0	0-77	8	38	4-58
PAVIA HOSP SANTURCE PR 00909	PR-54 *	1147	9	8-15	100	17	16-36	37	43	16-45	29	38	9-40	83	10	13-32	39	38	25-56	17	18	7-47	92	17	10-27
PONCE OIST HOSP PONCE PR 00731	PR-55 *	1080	19	7-14	40	20	12-40	44	41	15-42	37	32	7-33	87	33	12-30	38	42	21-51	14	64	3-45	110	28	10-26
PRESBYTERIAN COMMUNITY HOS SAN JUAN PR 00902	PR-56 *	1155	8	5-12	66	18	14-37	25	36	14-49	18	33	5-41	34	32	11-40	25	48	22-59	10	0	4-53	74	9	8-27
RYOERS MEMORIAL HOSP HUMACAO PR 00661	PR-57 *	1004	16	9-16	43	28	13-41	58	45	17-41	27	22	5-35	53	34	13-36	39	49	25-56	12	25	6-53	145	19	12-27
SAN AGUSTIN HOSP MANATI PR 00701	PR-58 *	1	0	0-100	.	.		.	.		.	.		.	.		.	.		.	.			.	

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Dphthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HATO REY COMMUNITY HOSP HATO REY PR 00919	8	25	8-68	5	40	8-77	6	0	0-65	110	0	0-11	90	1	1-11	40	0	0-21	20	0	0-100	66	3	1-13	49	0	0-33
HOSP OE LA CONCEPCIDN SAN GERMAN PR 00753	29	14	4-40	14	64	14-63	15	13	1-36	7	0	0-100	147	5	2-11	75	0	1-14	17	0	0-99	88	8	1-11	33	0	0-26
HOSP DR DOMIQUEZ HUMACAO PR 00661	4	0	1-77	1	100	1-97	5	0	1-68	27	0	0-78	126	1	1-10	41	0	0-20	3	0	0-100	51	0	1-15	9	0	0-93
HOSP DR SUSONI INC ARECIBO PR 00613	3	0	0-84	.	.		2	0	0-94	.	.		40	3	0-17	18	0	0-39	5	0	0-100	13	0	0-41	8	0	0-97
HOSP DR TITO MATTEI YAUCO PR 00768	1	0	0-97	2	50	2-90	.	.		.	.		69	4	1-12	25	4	0-28	9	0	0-98	42	2	1-17	3	0	0-100
HOSP HERNANDOS MELENDEZ BAYAMDN PR 00619	20	15	5-46	3	67	3-83	12	0	1-42	74	0	0-21	179	2	2-10	65	3	1-15	9	0	0-100	153	5	2-9	26	0	0-37
HDSP MATILDE BRENES BAYAMDN PR 00619	9	0	4-59	4	75	14-89	5	0	0-79	16	6	0-91	64	5	2-16	50	2	0-18	22	0	0-97	46	0	1-16	54	0	0-15
HOSP SAN CARLOS BDRROMEO MOCA PR 00716	7	14	3-64	7	57	9-72	2	0	0-98	18	0	0-96	94	1	1-11	16	0	1-35	9	0	0-100	55	2	1-14	14	0	0-82
HDSP SAN CRISTOBAL PONCE PR 00644	12	0	5-56	3	67	4-84	2	0	0-89	.	.		75	1	2-13	49	4	1-17	10	0	0-100	52	2	1-15	5	0	0-100
HOSP SAN MIGUEL INC UTUADO PR 00761	.	.		.	.		.	.		.	.		3	0	0-96	1	0	0-100	.	.		2	0	0-99	1	0	0-100
HOSP SAN RAFAEL CAGUAS PR 00625	9	0	3-59	7	29	8-70	12	0	1-43	66	0	0-25	179	1	2-9	68	3	1-15	32	0	0-97	79	3	1-11	22	0	0-66
HDSPITAL WILMA N VAZQUEZ VEGA BAJA PR 00764	9	11	5-61	4	50	4-78	4	0	1-74	.	.		110	0	2-11	26	0	0-27	6	0	0-100	73	3	1-12	16	0	0-77
HUMACAO AREA HDSP HUMACAO PR 00661	1	100	0-98	6	83	6-71	.	.		1	0	0-100	40	0	0-17	8	0	0-68	7	0	0-100	36	6	1-18	13	0	0-88
INSTITUTO OFTALMICO DE PUE SAN JUAN PR 00901	.	.		.	.		.	.		273	0	0-3	.	.		.	.		.	.		.	.		.	.	
LAFAYETTE HOSP ARRDYD PR 00615	1	0	0-98	.	.		2	0	0-91	20	5	0-93	62	0	1-14	18	0	0-39	5	0	0-100	33	3	1-19	4	0	0-100
MANATI AREA HDSP URB ATENAS MANATI PR 00701	17	6	5-48	14	50	15-63	7	29	0-61	67	0	0-22	197	3	2-8	55	2	1-16	29	0	0-97	217	3	2-8	24	4	0-36
MAUNABD MUN HOSP MAUNABO PR 00707	.	.		.	.		.	.		.	.		2	0	0-100	.	.		.	.		.	.		.	.	
MAYAGUEZ MED CTR MAYAGUEZ PR 00708	25	16	6-44	14	57	13-61	41	10	2-21	24	0	0-89	136	4	1-10	41	0	0-19	32	0	0-81	57	4	1-14	39	0	0-23
MENNDNITE GEN HOSP INC AIBONITO PR 00609	13	15	5-53	3	67	5-85	5	20	0-74	5	0	0-100	118	1	1-9	98	1	0-13	26	0	0-99	75	9	2-14	25	0	0-44
METROPOLITAN HDSP RID PIEDRAS PR 00922	9	22	4-60	17	59	17-62	21	5	1-30	171	0	0-5	144	3	2-10	131	4	1-11	33	0	0-92	92	3	1-11	43	0	0-21
MIMIYA HOSP SANTURCE PR 00909	1	0	1-97	1	0	0-97	.	.		451	1	0-2	17	0	0-33	12	0	0-53	1	0	0-100	11	9	0-48	.	.	
PAVIA HOSP SANTURCE PR 00909	8	13	8-68	4	0	3-76	13	0	2-41	12	0	0-100	123	2	1-10	85	1	0-14	18	0	0-99	148	1	2-9	50	0	0-17
PONCE DIST HOSP PONCE PR 00731	20	25	5-46	3	67	4-84	47	15	3-22	1	0	0-100	117	7	2-11	73	14	1-14	36	0	0-86	119	13	1-9	28	0	0-31
PRESBYTERIAN COMMUNITY HDS SAN JUAN PR 00902	16	19	6-51	3	67	4-85	14	7	1-38	173	0	0-6	141	5	2-10	108	1	1-12	25	0	0-93	109	4	2-11	49	0	0-22
RYDERS MEMDRIAL HDSP HUMACAO PR 00661	10	40	6-60	25	40	17-55	9	0	1-50	23	0	0-86	137	5	2-11	44	0	0-19	11	0	0-100	101	5	2-11	23	0	0-50
SAN AGUSTIN HOSP MANATI PR 00701	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SAN CARLOS GENERAL HOSPITA SANTURCE PR 00909	PR-59 *	530	8	5-13	14	14	7-50	16	19	9-50	13	15	3-46	20	15	10-47	8	63	12-71	10	20	4-54	54	11	7-28
SAN GERMAN HEALTH CENTER SAN GERMAN PR 00753	PR-60 *	25	8	2-29	.	.		2	50	3-91	.	.		.	.		.	.		.	.		8	0	1-54
SAN JORGE HOSP SANTURCE PR 00912	PR-61 *	568	7	5-12	28	32	11-44	15	7	8-51	18	11	2-37	13	8	8-53	8	63	14-74	14	7	4-46	48	19	9-33
SAN JUAN MUN HOSP RIO PIEDRAS PR 00935	PR-62 *	1199	21	8-15	119	12	12-30	49	43	13-38	25	36	8-41	37	27	9-36	81	52	25-47	12	42	3-47	100	47	11-29
SAN MARTIN HOSP RIO PIEDRAS PR 00923	PR-63 *	786	10	6-13	18	11	6-44	29	24	14-46	14	14	2-42	39	15	9-34	23	65	21-60	16	6	1-39	90	21	11-29
SAN PABLO HOSP BAYAMON PR 00619	PR-64	2409	11	8-14	159	29	19-37	63	19	17-40	57	12	7-29	167	26	16-30	73	51	26-50	38	24	7-34	227	16	11-24
SANTA ROSA CLINIC GUAYAMA PR 00654	PR-65 *	848	8	8-15	16	19	13-57	28	21	15-48	11	9	3-48	44	14	13-38	25	56	26-64	15	0	3-43	117	12	13-29
SANTO ASILO DE DAMAS HOSP PONCE PR 00731	PR-66 *	2027	11	8-14	124	20	16-34	87	24	18-38	39	33	12-40	139	16	14-29	68	41	26-50	26	23	7-40	112	21	11-28
ST JOHNS HOSP RIO PIEDRAS PR 00928	PR-67 *	11	0	3-49	.	.		1	0	2-98	.	.		.	.		.	.		1	0	0-99	3	0	3-83
ST LUKES EPISCOPAL HOSP PONCE PR 00731	PR-68	1427	10	7-13	55	15	14-40	52	35	16-41	28	18	7-38	64	31	14-36	38	47	22-53	15	13	3-43	161	13	11-26
UNIVERSITY DIST HOSP RIO PIEDRAS PR 00935	PR-69 *	1183	16	6-13	148	22	12-29	24	46	10-45	13	46	5-49	16	50	7-47	29	45	19-54	2	50	2-90	92	41	11-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
SAN CARLOS GENERAL HOSPITA SANTURCE PR 00909	10	10	3-56	7	71	14-78	3	0	0-92	33	0	0-75	82	4	2-13	31	3	0-24	9	0	0-100	49	8	1-16	17	0	0-72
SAN GERMAN HEALTH CENTER SAN GERMAN PR 00753	.	.		.	.		.	.		.	.		5	0	0-91	2	0	0-100	.	.		1	0	0-100	.	.	
SAN JORGE HOSP SANTURCE PR 00912	7	14	2-63	2	50	2-90	4	0	0-79	66	0	0-25	89	2	1-11	39	0	1-20	22	5	0-87	41	7	1-16	12	0	0-58
SAN JUAN MUN HOSP RIO PIEORAS PR 00935	12	25	2-51	30	90	16-51	24	4	2-28	69	0	0-27	135	4	1-9	77	5	0-14	17	0	0-88	94	6	1-11	23	0	0-53
SAN MARTIN HOSP RIO PIEORAS PR 00923	15	7	4-49	5	60	7-76	4	0	0-81	19	0	0-97	132	2	1-10	44	0	0-19	6	0	0-100	95	0	1-10	31	0	0-33
SAN PABLO HOSP BAYAMON PR 00619	29	28	12-50	16	63	16-62	38	18	3-24	78	0	0-13	312	2	2-8	179	1	1-10	37	0	0-84	225	4	2-8	95	0	0-10
SANTA ROSA CLINIC GUAYAMA PR 00654	12	8	6-56	2	50	4-92	1	0	0-98	33	0	0-70	130	4	2-11	38	0	0-21	8	0	0-100	63	3	2-14	21	0	0-34
SANTO ASILO OE OAMAS HOSP PONCE PR 00731	33	30	10-46	14	43	15-64	46	4	2-21	14	0	0-99	267	3	2-8	156	5	1-11	31	0	0-25	179	3	2-9	64	0	0-11
ST JOHNS HOSP RIO PIEDRAS PR 00928	.	.		.	.		.	.		.	.		.	.		1	0	0-99	.	.		.	.		2	0	0-100
ST LUKES EPISCOPAL HOSP PONCE PR 00731	20	10	5-46	3	0	3-84	17	18	1-34	100	0	0-12	122	3	1-10	103	0	1-12	20	0	0-98	282	9	2-7	22	5	0-34
UNIVERSITY OIST HOSP RIO PIEDRAS PR 00935	24	33	4-42	12	75	14-65	50	10	3-21	120	0	0-10	91	10	1-11	62	3	1-15	26	0	0-58	110	7	1-9	51	0	0-24

*Written Comments Not Submitted.

Hospital General Castañer Inc.
Apartado Postal 23, Castañer, Puerto Rico 00631
(809) 829-5010

October 28, 1987

William L. Roper, M.D.
HCFA Administrator
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

We have read carefully your request for comments about our profile on mortality information of Medicare patients.

The published information about Castañer General Hospital, Inc. (I.D. 400010) is accurate and complete. It only needs three minor corrections which are marked on the statistic sheet.

At this moment, we are reviewing the documents of mortality data of HCFA in order to develop a mortality review program on our Quality Assurance Committee.

If you need more information on this matter, do not hesitate to contact us.

Sincerely yours,

Omar E. Pérez
Administrator

OEP/cmr

Enclosure

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

DR. GUBERN'S HOSPITAL

EASTERN MEDICAL ASSOCIATES INC.
FAJARDO, PUERTO RICO 00648

P.O. BOX 846

TELS: 863-0924
863-1030

September 28, 1987

Dr. William L. Roper
Administrator
Department of Health and Human Services
Washington, DC

Dr. Gubern's Hospital
Provider No. 40-0094

Dear Sirs:

Regarding your mortality statistic of Medicare patients issued on September 21, 1987 we have the following observations; two of the patient's in the list, died in an unusual way, not related at all to their admission diagnosis.

[redacted] - Hospital Record 02-53-17 of age 73 admitted 04/28/86 and discharged 05/12/86 in improved condition of her principal diagnosis 57410 committed suicide. She was found by the registered nurse of a local home health agency"El Nazareno Home Care"dead. The patient had hanged herself with a cable wire and thus her death was certified as a suicide 05/13/86.

[redacted] - Hospital record 03-31-30 of age 57 admitted 12/10/86 and discharged 12/13/36 in recovered condition of his principal diagnosis 55090 was involved in a tragic fire accident on 12/31/86 which ocurred in the Hotel Dupont Plaza on 12/31/86.

To our understanding these two cases of death, not related at all to admision diagnosis, should be excluded from the actual mortality rate, since suicide and accident were beyond hospital control and both patient's where in the GI diagnostic category.

Of the patient's list submitted 12 died in the hospital, the remaining 9, (excluding the two cases mentioned) were all discharged in poor condition as verified in their medical records.

Our medical record Department will continue to review the information received and if it is deemed appropiate we will again clarify your information.

We are grateful for the opportunity given to express our views and expect that our information will further clarify the data and statistical process.

I remain,

Cordially,

Montserrat G. de Garcia, MHSA
Administrator

HATO REY COMMUNITY HOSPITAL

Another Basic American Medical Company

October 20, 1987

Dr. William L. Roper
Administrator
Health Care Financing Administration
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear doctor Roper:

Tank you very much for the information of mortality you send us. We verified that information but we have not any comments about this. Even that we appreciate the opportunity you gave us to do the any comment.

Cordially,

Mrs. Myrna Rivera, RRA
Medical Record Administrator

MR/nm

435 Ponce de León Avenue
Hato Rey, Puerto Rico 00917
(809) 754-0909

HOSPITAL WILMA N. VAZQUEZ
Carr. Núm. 2, Km. 39.5, Call Box 7001
Vega Baja, Puerto Rico 00764 • Tel. 858 - 1580

GLORIA CAMPOS AYALA
Executive Director
and Administrator

October 15, 1987

Dr. William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

RE: MEDICARE PROVIDER I.D. #400115

Dear Dr. Roper:

Reference is made to your letter of September 21, 1987, related to mortality information of Medicare patients in 1986.

We have reviewed information submitted and there are discrepancies as to age, date of admission, date of discharge, date of death and one case whose patient I.D. number doesn't match with surname.

We are including the list with information, as it appears in our records. You can compare the discrepancies with the original list submitted.

Thank you for your effort in producing this information.

Yours very truly,

Gloria Campos Ayala
Executive Director and
Administrator

Enclosure

GCA/mer

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

HOSPITAL ID NUMBER = 400115

PATIENT ID NUMBER (HIC)	SURNAME (First 6 ltrs.)	CATEGORY	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	PRINCIPAL DIAGNOSIS	PRINCIPAL PROCEDURE
		CE	92	M	7/22/86	7/29/86	7/30/86	430	
		CE	76	F	2/26/86	3/3/86	3/3/86	4340	
		CE	87	F	9/6/86	9/11/86	9/15/86	436	
		CE	87	F	6/18/86	6/25/86	6/25/86	4340	
		HL	83	M	10/31/86	11/23/86	11/23/86	42760	3770
		HL	70	M	11/7/86	11/13/86	11/13/86	4111	8964
		HM	77	F	11/12/86	11/25/86	11/25/86	4280	
		HM	80	M	5/29/86	6/02/86	6/8/86	4280	
		HM	66	M	4/21/86	4/28/86	5/3/86	4280	
		HM	83	M	11/21/86	11/24/86	11/24/86	4280	
		HM	90	M	11/16/86	11/17/86	11/17/86	4280	
		HS	69	M	10/23/86	10/27/86	10/27/86	4101	
		HS	73	M	12/19/86	12/19/86	12/19/86	78551	
		HS	77	F	11/20/86	11/22/86	11/22/86	4275	
		HS	94	M	11/02/86	11/02/86	11/2/86	4104	
		ME	73	M	3/15/86	3/21/86	4/10/86	2765	
		ME	84	M	9/12/86	9/18/86	9/30/86	2765	
		PN	73	M	5/13/86	5/19/86	5/31/86	485	
		PN	88	F	8/17/86	8/28/86	8/28/86	485	
		PN	69	F	4/26/86	5/2/86	5/2/86	4151	4413
		RN	84	M	8/8/86	8/17/86	8/26/86	599.0	
		SE	72	F	12/3/86	12/5/86	12/5/86	0389	
		SE	75	M	9/11/86	9/14/86	9/14/86	0389	
		CA	81	F	9/3/86	9/16/86	9/16/86	2391	
		SE	80	M	9/18/86	9/27/86	9/27/86	0389	5411
		PN	86	M	8/19/86	9/18/86	9/18/86	7991	
		GANGRENE	82	F	3/24/86	4/8/86	4/8/86	7854	8622
		PN	75	F	12/4/86	12/14/86	12/14/86	7991	4413

PR 44.1

HOSPITAL SAN PABLO

October 30, 1987

William L. Roper, M.D.
Administrator
Department of Health and
Human Services
Health Care Financing Administration
Washington, DC 20201

Dear Doctor Roper:

In the course of reviewing the information regarding the mortality rates for our Hospital, presented by your Department in September 21, 1987, we would like to present the following comments:

a) In the mortality cases presented in the tabulation of the ratios in that the Hospital exceeds the predicted mortality rates, you can observe that the life expectancy of these patients exceed the nation's rates of life expectancy.

b) In the tabulation of the data there is no evidence of consideration for comobilities.

We consider that the above-mentioned observations should be taken in consideration before the tabulation of this data. We believe that the purpose of the publication of this information will be better served if this action is taken at its proper time.

Thank you for your attention to this matter.

Cordially,

Iván E. Colón, MHSA
Associate Administrator

zsv

c: Dr. Arturo Cadilla, Jr.
Mr. Roberto Hernández

P.O. Box 236, Bayamón, Puerto Rico 00621-6036 — (809) 786-7474

HOSPITAL EPISCOPAL SAN LUCAS
CALLE GUADALUPE FINAL - APARTADO 2027
PONCE, PUERTO RICO 00733
(809) 840-4545

October 13, 1987

William L. Roper, MD
Administrator
Department of Health &
Human Service
Washington, DC

RE: Hospital ID No. 400002
St. Luke's Hospital
Ponce, Puerto Rico

Dear Dr. Roper:

The information submitted by you regarding mortality of Medicare patients treated in our hospital during 1986 has been reviewed by me and I wish to object to the classification you made of several cases. I have specifically analyzed the 24 patients grouped under Low-Risk Heart Disease (HL) for it is in this category that our Hospital had a rate higher than the predicted mortality rate - i.e. actual mortality rate of 9% with a predicted rate of 2 - 7 %. Our overall mortality rate in 1427 cases was 10% within the predicted norm. I could not analyze for lack of time and unavailability of all cases admitted in 1986 in the HL category, and in the other two relating to heart disease (HM and HS), but it is hard to believe that low risk patients would represent 73.4% of all heart cases admitted (282/384) specially after reviewing the 24 patients who died. Specific comments:

1. - 74 yr. male. A case of three vessel coronary artery disease found to be inoperable, and who had an acute myocardial infarction, complicated by cardiogenic shock. He should have been classified under severe acute high risk heart disease (HS) complicating severe chronic heart disease (HM).

2. An 85 yr. old male with sick sinus syndrome, in whom a VVI cardiac pacemaker was implanted. Subsequently he developed an acute massive cerebral infarction which was the cause of death. Again this is clearly a high risk condition, and should be categorized under stroke (CE).

- A 79 yrs. old female with an acute inferior wall myocardial infarction, complicated by heart block and shock, causing death within 24 hours after admission. Again this is an acute high risk heart condition (HS).

A - 89 years old female who was hospitalized 4/21 - 4/27/86 for unstable angina. She was discharged, but was readmitted that same day with evidence of an acute inferior wall myocardial infarction, which caused cardiac arrest and death.

Conclussion: High risk cardiac condition (HS)

In addition, there were several patients who apparently died after discharge, and should have been categorized as severe chronic heart disease - A 99 years old female, with cardiac pacemaker and angina pectoris who had normal enzymes and died at home;

- 73 years old female with severe aortic stenosis with a gradient of 100 mm. across the calcified aortic valve who refused surgery and died at home].

Thus, it seems that your data has been misinterpreted in a significant number of cases, not reflecting the real severity of the illness; you have reported deaths under the admitting diagnosis when not infrequently death in these elderly patients is caused by other conditions; and other factors which may contribute to deaths after discharge are not being considered.

Sincerely yours,

Héctor F. Rodríguez, MD, FACP, FACC
Medical Director

gmp

cc: Mr. Pedro Brull
St. Luke's Hospital Administrator

Rhode Island

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CRANSTON GENERAL HOSPITAL CRANSTON RI 02905	RI-3 *	663	13	8-16	42	24	13-41	22	50	14-52	6	17	1-63	35	17	11-38	24	29	19-56	20	15	8-4S	S3	21	12-35
JOHN FOGARTY MEMORIAL HOSP WOONSOCKET RI 0289S	RI-4 *	1128	13	10-17	65	28	14-37	43	35	18-45	41	17	8-35	80	21	15-34	S3	43	26-52	25	12	8-43	109	18	14-31
KENT COUNTRY MEMORIAL HOSP WARWICK RI 02886	RI-5	3546	12	9-15	2S4	1S	12-27	133	19	19-36	86	14	8-27	256	24	16-27	212	37	31-47	66	20	11-34	268	20	13-26
MIRIAM HOSPITAL PRDVIDENCE RI 02906	RI-6 *	2935	10	9-1S	204	17	15-31	81	16	18-39	9S	13	11-31	1S5	22	18-32	136	27	29-47	42	14	10-38	228	18	16-29
NEWPORT HOSPITAL NEWPORT RI 02840	RI-7 *	1583	11	9-16	118	31	17-37	56	27	18-42	S5	7	9-31	110	11	1S-31	63	49	29-54	19	21	8-47	124	22	14-30
NOTRE DAME HDSPITAL CENTRAL FALLS RI 02863	RI-8 *	361	8	8-16	19	11	8-46	4	0	4-77	5	0	1-68	30	20	14-45	16	25	18-63	11	9	9-60	31	16	8-36
RHDDE ISLAND HOSPITAL PRDVIDENCE RI 02902	RI-9	614S	12	9-15	622	19	13-26	2S4	27	21-34	206	21	9-24	316	19	16-27	271	39	30-45	75	20	9-30	420	24	16-27
ROGER WILLIAMS GENERAL HOS PROVIOENCE RI 02908	RI-10	2346	13	10-16	151	14	16-34	81	21	18-39	76	24	10-30	113	29	16-32	113	40	30-S0	67	27	10-34	213	21	15-29
SOUTH COUNTY HOSPITAL WAKEFIELD RI 02879	RI-11 *	961	12	8-15	63	21	10-33	33	18	16-47	37	27	5-31	57	35	16-39	38	42	23-54	32	22	7-38	85	14	9-27
ST JDSEPHS HDSP NORTH PRDVIDENCE RI 02904	RI-12 *	3713	11	9-16	328	19	16-31	141	2S	20-36	102	22	11-30	206	23	17-29	161	32	29-47	85	24	12-33	310	19	14-26
THE MEMORIAL HDSPITAL PAWTUCKET RI 02860	RI-13	2962	13	11-17	206	20	16-33	109	30	20-38	72	24	9-30	182	19	17-31	179	34	34-51	65	32	14-38	273	17	15-27
WESTERLY HOSP WESTERLY RI 02891	RI-14	1319	13	9-16	101	27	14-34	47	36	16-42	25	12	S-36	95	16	14-31	60	37	26-S1	23	26	5-39	130	24	13-29
WOMEN AND INFANTS HOSP PROVIDENCE RI 02908	RI-1S	96	0	0-14	14	0	2-41	.	.		.	.		.	.		.	.		.	.		.	.	
WOONSOCKET HDSP WOONSOCKET RI 0289S	RI-16 *	2042	13	11-17	136	24	16-35	99	22	20-39	62	24	12-35	164	21	16-30	100	46	32-52	4S	13	12-40	229	19	14-27

*Written Comments Not Submitted

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
CRANSTON GENERAL HOSPITAL CRANSTON RI 02905	5	60	12-84	14	43	12-60	18	17	1-32	.	.		88	6	2-13	28	7	1-25	6	33	0-93	61	3	1-13	35	0	0-24
JOHN FOGARTY MEMORIAL HOSP WOONSOCKET RI 02895	10	40	9-65	14	21	18-68	39	10	2-21	12	0	0-99	133	5	2-10	53	2	1-17	12	0	0-99	111	4	2-11	54	4	0-13
KENT COUNTRY MEMORIAL HOSP WARWICK RI 02886	36	14	10-45	30	40	23-60	105	10	3-15	38	0	0-59	333	6	2-8	167	3	1-11	27	0	0-93	305	3	2-7	171	1	0-6
MIRIAM HOSPITAL PROVIDENCE RI 02906	18	22	7-51	31	35	24-60	75	3	4-19	78	1	0-16	240	5	3-9	126	3	1-12	8	0	0-100	358	6	3-8	146	1	0-6
NEWPORT HOSPITAL NEWPORT RI 02840	9	22	11-69	25	40	21-60	57	9	4-21	12	0	0-97	137	5	2-10	53	2	1-17	10	0	0-98	88	2	2-12	108	0	0-7
NOTRE DAME HOSPITAL CENTRAL FALLS RI 02863	3	0	3-83	.	.		.	.		8	0	0-99	53	8	1-15	12	8	1-42	6	0	0-100	39	5	1-17	12	0	0-80
RHODE ISLAND HOSPITAL PROVIDENCE RI 02902	51	27	13-46	69	41	24-50	224	9	5-15	134	1	0-7	493	7	2-7	253	5	2-11	26	0	0-76	663	4	2-6	306	2	0-4
ROGER WILLIAMS GENERAL HOS PROVIDENCE RI 02908	17	41	7-52	36	44	22-56	76	11	4-18	6	0	0-100	223	6	2-9	140	8	3-14	8	0	0-84	194	3	2-9	111	4	0-7
SOUTH COUNTY HOSPITAL WAKEFIELD RI 02879	5	20	1-71	13	46	14-64	24	4	1-27	9	0	0-99	112	5	2-11	42	5	1-19	10	0	0-99	95	5	1-11	37	0	0-20
ST JOSEPHS HOSP NORTH PROVIDENCE RI 02904	17	35	5-49	33	30	22-57	90	12	4-18	19	0	0-56	385	4	3-9	210	2	2-11	36	0	0-36	201	5	2-8	284	0	0-4
THE MEMORIAL HOSPITAL PAWTUCKET RI 02860	24	38	11-52	38	37	19-51	81	6	4-18	6	0	0-100	261	4	3-10	147	6	3-13	28	0	0-58	271	6	3-9	121	4	1-7
WESTERLY HOSP WESTERLY RI 02891	12	33	5-55	9	44	9-65	27	11	2-26	12	0	0-95	183	4	3-10	51	8	1-17	6	0	0-100	136	3	2-9	42	2	0-17
WOMEN AND INFANTS HOSP PROVIDENCE RI 02908	.	.		.	.		.	.		.	.		.	.		.	.		55	0	0-56	.	.		.	.	
WOONSOCKET HOSP WOONSOCKET RI 02895	14	43	8-56	25	56	17-56	42	12	3-23	1	0	0-100	197	7	3-11	87	1	2-14	11	0	0-96	215	4	2-8	81	0	0-9

*Written Comments Not Submitted.

KENT COUNTY MEMORIAL HOSPITAL

455 TOLL GATE ROAD • WARWICK, RHODE ISLAND • 02886 • (401) 737-7000

JOSEPH A. DI PIETRO
Assistant Administrator

October 29, 1987

Ms. Denise Hopkins
Department of Health & Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Subj: Medicare Mortality Rate Study
Medicare Provider No. 41-0009

Dear Ms. Hopkins:

Enclosed you will find the comments of Kent County Memorial Hospital in response to the Medicare Mortality Rate Study. As you assured me by telephone on October 28, 1987, our comments will be included with the disclosure of Kent County Memorial Hospital rate data.

Thank you for providing us with this extension.

Very truly yours,

Joseph DiPietro
Assistant Administrator

JAD/vcb

Enclosure

KENT COUNTY
MEMORIAL HOSPITAL
455 TOLL GATE ROAD • WARWICK, RHODE ISLAND • 02886 • (401) 737-7000

JOHN J. HYNES, Esq.
Administrator

October 29, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MD 21207

SUBJECT: Medicare Mortality Rate Study
Medicare Provider Number 41-0009

To Whom It May Concern:

Kent County Memorial Hospital welcomes this additional opportunity to comment on the recent study by the Health Care Financing Administration (HCFA) of selected mortality information from all short-term acute-care hospitals which treated Medicare patients in 1986. The Hospital agrees the public is entitled to valid and reliable information about the quality of care furnished by health care providers and HCFA's study represents a first step toward nationwide analysis. However, because it is only a beginning and because HCFA's methodology has not been validated, it is imperative that the disclosure of this information to the public include a closely detailed explanation calling the public's attention to the limitations of the data.

An underlying theme of the HCFA study is that deaths constitute unacceptable outcomes of hospital care. However, high mortality rates are not, by themselves, the issue. More importantly, the legitimate concern pertains to preventable deeaths. While the study assumes that higher rates of hospital mortality are indicative of higher rates of preventable mortality, there is no support for this assumption. There has been no demonstration that deviations from predicted mortality rates are the result of care provided.

More specifically, while it is recognized that there is no standard model to predict hospital mortality, a study with this level of visibility and sensitivity certainly requires a clearly stated theoretical base. HCFA relied on data readily available from Medicare billing information. These variables are frequently insignificant and, more important, fail to include critical factors that affect hospital mortality rates. Although it was unnecessary for the HCFA study to include all possible explanatory variables, the influence of certain factors should have at least been stated. For example, the presence of a high intensity emergency service and/or an active transfer arrangement with multiple nursing homes would be expected to increase a hospital's mortality rate. However, such variables were not included in the HCFA model.

Proper control for the mix of diagnoses treated by a hospital is another question of modeling. It is evident that patients who are admitted to the hospital in a more severely ill condition are more likely to die and this must be factored into any analysis of hospital mortality. There is substantial and growing body of literature dealing with case severity in health services research, but it was never brought to bear on the study. For example, one such study of institutional differences in postoperative mortality found that the variation in death rates for a number of surgical procedures dropped from fivefold to twofold when adjustments for case severity were introduced. See Williams, S. and P. Torrens, Introduction to Health Services, 2d Edition, New York: John Wiley & Sons, 1984, p.370.

In addition, it is important to recognize that the course of an illness is affected by a variety of other factors, many of which have nothing to do with the patient's hospital care. For example, these other factors include preventive health care measures, availability of medical care, patient compliance with prescribed regimens, timeliness of hospital admission, social factors, and personal health care. It is impossible to isolate only one dimension of health care management - the hospital stay - to measure quality of care.

In summary, a mortality analysis must be adjusted to more accurately reflect a particular hospital's mortality experience. Rather than reflecting lower hospital quality, a higher crude death rate may simply reflect the inevitable course of events in any area with an active hospital-based Home Care Department, a busy Emergency Room, relatively scarce nursing home beds, and an aging population.

I would once again encourage you to consider and incorporate the foregoing concerns into the methodology as it undergoes further necessary refinement. In so doing, we can be confident that we are providing the public with reliable, complete, and valid performance-related information.

Sincerely,

John J. Hynes, Esq.
Administrator

JJH/vmp

RHODE ISLAND HOSPITAL/PROVIDENCE, RHODE ISLAND/02903

October 22, 1987

Health Care Financing Administration
Health Standard and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 20217

RE: Rhode Island Hospital #410007

Gentlemen:

Rhode Island Hospital has received and reviewed the mortality data developed by HCFA for 1986, and submits the following comments.

The mortality rates for Rhode Island Hospital are within the predicted ranges as established by HCFA.

Rhode Island Hospital is a tertiary referral hospital as well as a designated regional trauma center. Our role in the community is to accept for treatment many patients whose full range of medical needs cannot be met in community hospitals throughout this State and Southeastern Massachusetts. From this perspective, HCFA's admitted lack of a system for measuring severity is a major deficiency, and may in fact represent a significant degree of inequity, inasmuch as the public will not understand the significance of such a deficiency.

This deficiency was confirmed in our review of individual mortality records, during which our physician reviewers noted with concern that patients with chronic renal failure, liver metastases, sepsis and chronic obstructive pulmonary disease were grouped into the low risk category according to HCFA methodology. The methodology also fails to account for multiple admissions in the same year, a failure which is of particular significance at Rhode Island Hospital inasmuch as it greatly reduces the denominator in the calculation. It is a well-known fact that many elderly patients have chronic conditions which require repeated hospitalizations throughout a given year. The elderly account for 50% of the patient days at Rhode Island Hospital. A further aspect of the methodology which must be stressed is that mortalities within 30 days of discharge were counted in the mortality rate. Mortalities occurring during this time period may not be related to previous hospitalization.

Proper control for the mix of diagnoses treated by a hospital is another question of modeling. It is evident that patients who are admitted to the hospital in a more severely ill condition are more likely to die and this must be factored into any analysis of hospital mortality. There is substantial and growing body of literature dealing with case severity in health services research, but it was never brought to bear on the study. For example, one such study of institutional differences in postoperative mortality found that the variation in death rates for a number of surgical procedures dropped from fivefold to twofold when adjustments for case severity were introduced. See Williams, S. and P. Torrens, Introduction to Health Services, 2d Edition, New York: John Wiley & Sons, 1984, p.370.

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Sincerely,

John J. Hynes, Esq.
Administrator

JJH/vmp

RHODE ISLAND HOSPITAL/PROVIDENCE, RHODE ISLAND/02903

October 22, 1987

Health Care Financing Administration
Health Standard and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 20217

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During the course of review of our mortality rates, it was also noted that many of the patients who died had been designated as "Do Not Resuscitate" at the request of the patient and/or family. In addition, it was noted that HCFA's methodology for sequencing diagnoses can misrepresent the true cause of death. For example, a low risk Gastrointestinal Disease mortality may have been in fact related to an underlying end-stage malignancy.

Finally, we have an on-going concern about the public's interpretation of the mortality rates. HCFA is focusing on mortality rates in its current quality initiative, despite the lack of objective scientific evidence to support a direct relationship between mortality rates and quality of care. Mortality rates constitute only one aspect of potential quality indicators. Other major components are morbidity rates, credentialing requirements of the medical staff, availability of multiple services and specialties, availability of state-of-the-art diagnostic tools, and level of patient satisfaction. In fact, the Joint Commission on Accreditation of Hospitals in its agenda for change does not limit its reviews to mortality but emphasizes the importance of morbidity reviews, credentialing, adequacy of services, staffing and other important factors in the assessment of quality.

Sincerely,

Robert G. Norton
Executive Vice President/Operations

Boyd P. King, M.D.
Chairman
Staff Quality Assurance Committee

/cb

Roger Williams General Hospital

825 Chalkstone Avenue, Providence, RI 02908 (401)456-2000

Vito F. Rallo, President

October 26, 1987

William Roper, M.D.
Administrator
Health Care Financing Administration
Hospital Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

The Roger Williams General Hospital appreciates this opportunity to comment on HCFA's December release of 1986 mortality data pertinent to patients cared for at our facility.

We concur HCFA's present system of projecting "expected mortality ranges" is an improvement over its previous approach to this matter. However, we noted inaccuracies in both the statistical and clinical data related to the Roger Williams General Hospital. More specifically, the total number of deaths recorded does not coincide with those reflected in the HCFA statistics. In the attachment entitled "Patients whose death occurred in a year subsequent to the year of admission" one individual was never a patient at the Roger Williams General Hospital.

In addition, we would like to suggest some factors that have not been included in your proposed methodology. Most notably:

1) The prevalence of significant complicating diagnoses. During a review of the data pertinent to the patients in question who expired within the "low risk categories", there was evidence of significant secondary disease entities, such as acute MI's, staph septicemia, metastatic cancer, and respiratory and vascular diseases which significantly effected the patient's outcome. The secondary diagnosis, although most likely the true cause of death, apparently were not relevant in HCFA categorization of low risk mortalities.

2) The availability or lack thereof of other health care facility resources. At present, Rhode Island is experiencing a significant backlog of nursing home patients within its acute health care system. In a recent report from the Hospial Association of Rhode Island, it was noted that in September, 1986, there were 81 patients awaiting placement to long-term care facilities from hospitals. Subsequently, in September, 1987, this number has increased to 198

patients at any one time awaiting placement to long-term care facilities. As such, hospitals have become the only facilites capable of providing the care necessary to treat these long-term care patients, and thus this would make the hospital's mortality rate compare high in comparison to other parts of the country.

Once again, the Roger Williams General Hospital appreciates the opportunity to comment on the HCFA report. If additional information is necessary in regard to the aforementioned statements, please do not hesitate to contact me.

Sincerely,

Robert A. Urciuoli
Chief Operating Officer

RAU/dc

MEMORIAL HOSPITAL
of Rhode Island

October 23, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 2684
Baltimore, Maryland 21207

Gentlemen:

A review of the cases listed with the mortality information was accurate with the following exceptions:

1. [redacted] was discharged alive on 2/19/86 according to our records.

2. [redacted] died at the hospital on 10/3/86 but is listed as having died on 10/7/86.

3. [redacted] died at the hospital on 5/8/86 but is listed as having died on 5/14/86.

4. [redacted] died at the hospital on 4/17/87 but is listed as having died on 4/18/86.

This information is submitted to assist in providing accurate data.

Very truly yours,

Francis R. Dietz
President

FRD/nkg

Memorial Hospital
Pawtucket, Rhode Island 02860 401-722-6000
A Brown University Affiliated Hospital

EXECUTIVE
VICE-PRESIDENT

The Westerly
Hospital
Wells Street
Westerly
Rhode Island
02891
401·596·6000

October 30, 1987

William L. Roper, MD, Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Dear Dr. Roper:

We have received The Westerly Hospital's specific mortality data as prepared by HCFA, and though we are still in the process of validating it internally, I would like to submit our initial comments for your consideration.

Our Hospital's actual rates fall well within HCFA's range of predicted averages for Medicare patients. Our records, which are verified by PAS data, indicate that of the 2110 Medicare patients treated within the time frame there were 155 Medicare deaths. Your data, as presented, indicates that we had a total of 1319 Medicare cases in the selected categories with deaths calculating out to 171. We are assuming that your figures are higher because you included deaths that occurred within thirty days after discharge from the hospital.

The statistics, as presented, could prove to be harmful to hospitals with higher rates than those predicted, especially if this data alone is used to make judgements about the quality of care at those hospitals. To imply that a patient's death may be attributable to an individual hospital, when that patient dies within 30 days of the last Hospital admission, does not necessarily measure the quality of care provided in that facility. The course of illness is affected by a variety of circumstances, many of which are beyond the control of hospitals. Personal health factors, which are difficult to measure, should play an equally important role in death statistics. They include, but are not limited to: willingness to seek medical care; access to care; heredity; social factors; lifestyle; preventive measures; and compliance with pre-hospital treatment regimens. Quality measurements must extend beyond the hospital setting if they are to be meaningful and must consider other patient and institutional variables that were not incorporated into the model. Therefore, the results of the statistical analysis may result from failures of the model.

We appreciate your efforts to study and make available data on one aspect of the important and broad quality subject. We also appreciate the opportunity to comment prior to the release of data to the public. As providers of health care we must, however, be the ones to define quality in its broadest scope and once this is done find ways to measure and provide optimal quality care.

There is no doubt that consumers, employers, and third-payer payors need information about the health care they receive and purchase. However, this information should be made available by the hospital industry. It is physicians and hospitals who deliver the care. They possess the expertise, knowledge, and experience to develop quality assessment methods and measures and analyze data to study the relationship between treatment and patient outcome and these efforts are now underway. Hospitals, individually, are already taking steps to identify indicators of quality and use indicators in the provision of patient care.

There <u>is</u> a need for better information in health care to understand patterns of utilization and cost, and assess the appropriateness and quality of medical care. Physicians and hospitals are ultimately responsible and accountable for the outcome of the care they provide, and they should be responsible for the collection, analysis, and interpretation of data used in the evaluation of that care.

Sincerely yours,

S. Jeffrey Bastable
Executive Vice-President

SJB:mda

cc: Calvin Pierson, President, Hospital Association of Rhode Island
Carol McCarthy, President, American Hospital Association

Women and Infants Hospital
Providence, Rhode Island

Provider Number: 41-0010

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.

South Carolina

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ABBEVILLE CO MEMORIAL HOSP ABBEVILLE SC 29620	SC-7	397	12	9-17	16	38	10-52	20	40	16-56	9	0	2-53	22	27	9-44	20	55	20-61	13	8	7-52	43	12	8-32
ALLEN BENNETT MEMORIAL HOS GREER SC 29651	SC-8	742	11	8-16	58	10	10-33	21	29	13-51	13	8	2-44	42	26	10-34	36	39	24-56	12	0	4-50	50	24	10-34
ALLENDALE CO HOSP FAIRFAX SC 29827	SC-9 *	266	12	8-18	7	100	10-73	17	29	13-54	5	40	2-69	24	8	9-42	12	42	19-71	7	0	1-59	40	18	8-34
AMI DOCTOR'S MEMORIAL HOSP SPARTANBURG SC 29303	SC-10 *	749	4	3-10	34	6	10-39	8	25	8-66	5	0	1-68	15	13	5-45	10	50	16-70	4	0	0-81	27	4	7-37
AMI EAST COOPER COMMUNITY MT PLEASANT SC 29464	SC-11 *	394	12	8-17	22	32	14-52	13	15	10-56	10	10	4-53	15	27	11-54	16	31	19-65	9	0	2-53	37	27	9-36
ANDERSON MEMORIAL HOSP- ANDERSON SC 29621	SC-12	4220	11	9-15	374	27	20-34	131	23	20-37	65	22	10-31	189	21	16-29	135	42	29-47	63	8	8-30	388	18	13-24
B J WORKMAN MEMORIAL HOSP- WOODRUFF SC 29388	SC-13 *	229	10	6-16	3	33	1-81	9	33	7-60	4	0	1-74	11	9	6-54	9	33	13-70	3	0	0-88	34	15	7-34
BAILEY MEMORIAL HOSP- CLINTON SC 29325	SC-14 *	362	12	7-15	21	33	9-45	14	36	11-56	11	9	2-48	16	13	9-51	13	54	14-62	8	25	2-56	43	16	6-30
BAKER HOSP N CHARLESTON SC 29406	SC-15 *	467	10	7-15	26	31	12-47	22	23	11-47	8	25	3-58	24	25	10-44	12	42	15-65	9	33	3-54	39	18	7-32
BAMBERG CO MEMORIAL HOSP- BAMBERG SC 29003	SC-16 *	459	14	8-16	26	35	9-42	20	50	17-57	3	33	1-81	15	13	6-47	14	57	22-71	17	12	3-41	44	25	9-34
BAPTIST MEDICAL CENTER AT COLUMBIA SC 29220	SC-17 *	3224	10	7-14	448	27	20-34	88	19	17-36	63	16	10-32	75	36	13-32	55	40	25-51	25	16	3-35	213	13	10-23
BAPTIST MEDICAL CTR EASLEY EASLEY SC 29640	SC-18	997	13	8-15	84	17	15-37	28	36	13-45	22	27	7-42	46	20	11-35	34	53	19-50	29	10	5-35	91	27	10-27
BARNWELL REGIONAL HOSP BARNWELL SC 29812	SC-19	303	22	11-21	18	50	11-53	28	36	13-46	19	21	6-42	12	33	5-49	8	63	16-76	24	25	6-39	39	28	11-39
BEAUFORT CO MEMORIAL HOSP- BEAUFORT SC 29902	SC-20 *	749	10	8-15	53	23	14-39	22	36	11-47	13	8	4-47	36	6	10-37	36	36	22-54	24	17	7-41	56	11	10-31
BRUCE HOSP FLORENCE SC 29501	SC-21 *	1473	8	7-14	100	18	18-39	42	24	15-43	13	8	6-50	47	15	13-38	45	44	25-54	28	7	4-34	140	14	10-24
BYERLY HOSP HARTSVILLE SC 29550	SC-22 *	746	13	7-15	40	40	18-48	29	38	16-49	7	0	2-59	41	39	10-35	16	19	19-64	19	11	4-40	82	13	8-26
CANNON MEMORIAL HOSP- PICKENS SC 29671	SC-23	460	13	8-16	20	40	14-54	22	36	13-50	10	20	2-50	18	17	8-46	16	44	17-61	6	17	3-65	62	18	12-34
CHARLESTON MEMORIAL HOSP CHARLESTON SC 29401	SC-24	504	16	8-16	29	41	15-49	17	24	9-49	10	20	3-52	33	9	10-38	13	31	16-65	19	21	3-38	42	29	11-37
CHEROKEE MEMORIAL HOSP GAFFNEY SC 29340	SC-25 *	728	12	7-15	39	33	13-42	24	29	14-50	9	22	4-56	30	17	8-37	32	41	23-56	18	28	4-42	81	19	8-26
CHESTER CO HOSP CHESTER SC 29706	SC-26 *	619	14	8-16	33	42	13-44	40	35	15-43	13	8	1-43	32	25	11-40	30	30	22-56	13	0	3-46	70	27	11-31
CHESTERFIELD GENERAL HOSP CHERAW SC 29520	SC-27	365	18	8-17	22	55	12-49	19	42	12-51	6	0	2-63	22	18	10-44	6	67	9-74	19	21	5-42	37	35	9-36
CLAREDON MEM HOSP MANNING SC 29102	SC-28 *	459	12	8-16	18	50	9-49	30	23	12-42	6	33	1-63	25	32	9-41	25	36	21-59	13	15	4-48	45	16	8-31
COLLETON REGIONAL HOSP- WALTERBORO SC 29488	SC-29	846	14	9-16	51	39	15-42	46	39	18-45	7	57	6-66	68	29	14-35	34	29	23-56	27	15	4-35	92	17	10-27
CONWAY HOSP INC CONWAY SC 29526	SC-30 *	1153	10	8-15	62	21	18-43	41	32	15-43	26	12	5-36	56	20	13-35	42	45	25-55	28	18	7-39	106	11	11-27
DIVINE SAVIOUR HOSP- YORK SC 29745	SC-31	291	19	7-17	15	67	11-55	17	35	12-53	6	0	4-67	11	18	6-53	6	67	12-78	11	18	1-48	32	22	7-35
EDGEFIELD CO HOSP EDGEFIELD SC 29824	SC-32	226	12	8-18	3	100	5-86	13	0	8-54	4	0	0-75	15	47	9-51	5	40	11-81	24	25	9-45	24	13	5-36

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ABBEVILLE CO MEMORIAL HOSP ABBEVILLE SC 29620	4	25	2-76	2	50	5-93	9	11	1-50	.	.		49	0	1-15	30	0	0-23	6	0	0-100	47	2	1-16	12	0	0-56
ALLEN BENNETT MEMORIAL HOS GREER SC 29651	7	14	5-67	3	0	3-83	32	6	3-27	.	.		89	4	2-12	98	10	2-14	11	0	0-97	63	5	1-13	24	0	0-25
ALLENOALE CO HOSP FAIRFAX SC 29827	1	100	1-97	.	.		.	.		.	.		22	0	0-27	11	0	1-45	.	.		18	0	0-31	6	0	0-100
AMI DOCTOR'S MEMORIAL HOSP SPARTANBURG SC 29303	3	33	4-85	5	40	8-78	5	0	0-81	265	0	0-3	73	4	1-13	40	3	0-20	8	0	0-100	32	6	1-20	55	2	0-15
AMI EAST COOPER COMMUNITY MT PLEASANT SC 29464	2	0	0-92	9	67	12-70	13	0	1-40	4	0	0-100	48	4	1-16	21	0	0-31	8	0	0-100	24	8	1-25	20	5	0-49
ANOERSON MEMORIAL HOSP- ANOERSON SC 29621	40	25	9-43	60	45	23-51	115	7	4-16	29	0	0-80	476	4	3-8	230	4	2-10	35	0	0-63	335	5	3-8	184	2	1-6
B J WORKMAN MEMORIAL HOSP- WOOORUFF SC 29388	5	0	2-71	1	0	0-97	.	.		.	.		30	0	0-21	2	0	0-91	.	.		30	13	1-21	8	13	0-92
BAILEY MEMORIAL HOSP- CLINTON SC 29325	2	0	0-94	1	0	0-98	17	6	3-37	4	0	0-100	47	6	1-15	6	0	0-63	6	0	0-100	44	2	1-16	9	0	0-86
BAKER HOSP N CHARLESTON SC 29406	8	0	3-61	3	67	4-84	12	25	1-42	1	0	0-100	59	3	1-13	15	0	0-39	3	0	0-100	30	3	1-22	23	0	0-42
BAMBERG CO MEMORIAL HOSP- BAMBERG SC 29003	9	56	7-63	6	50	8-73	2	0	0-93	.	.		79	1	1-12	17	0	1-34	4	0	0-100	39	8	1-17	13	0	0-52
BAPTIST MEOICAL CENTER AT COLUMBIA SC 29220	26	19	8-46	13	54	16-66	56	5	2-19	14	0	0-99	384	6	2-8	194	3	1-10	69	0	0-33	142	6	2-10	230	0	0-5
BAPTIST MEOICAL CTR EASLEY EASLEY SC 29640	9	11	3-59	8	50	16-77	28	11	1-25	21	0	0-88	107	2	2-11	102	6	1-13	10	0	0-94	71	13	1-12	50	0	0-19
BARNWELL REGIONAL HOSP BARNWELL SC 29812	7	14	5-67	7	71	9-71	1	100	0-100	.	.		24	8	1-26	14	21	2-40	3	0	0-100	24	4	0-25	6	0	0-96
BEAUFORT CO MEMORIAL HOSP- BEAUFORT SC 29902	11	27	8-61	10	30	11-65	18	6	1-32	20	0	0-91	76	1	2-13	40	0	0-23	14	0	0-94	55	4	1-14	38	3	0-23
BRUCE HOSP FLORENCE SC 29501	16	6	4-49	13	38	17-67	16	13	3-38	3	0	0-100	170	2	2-9	132	5	2-12	24	0	0-94	118	3	1-9	86	0	0-9
BYERLY HOSP HARTSVILLE SC 29550	6	17	2-67	21	57	13-53	.	.		.			115	3	2-11	21	14	1-29	4	0	0-100	89	3	1-11	24	0	0-42
CANNON MEMORIAL HOSP- PICKENS SC 29671	1	100	1-97	4	25	5-80	8	13	1-54	1	100	0-100	39	8	1-18	48	4	1-18	7	0	0-100	50	4	1-14	17	12	0-54
CHARLESTON MEMORIAL HOSP CHARLESTON SC 29401	10	20	3-56	5	60	8-78	8	0	1-54	2	0	0-100	29	10	1-22	47	15	1-19	2	0	0-100	22	5	1-26	13	0	0-51
CHEROKEE MEMORIAL HOSP GAFFNEY SC 29340	7	43	8-71	4	50	6-81	20	15	1-30	.	.		93	1	2-13	50	6	1-17	9	0	0-96	58	2	1-14	22	0	0-49
CHESTER CO HOSP CHESTER SC 29706	8	25	4-63	6	33	15-83	13	8	1-40	1	0	0-100	76	3	1-12	29	10	1-24	4	0	0-100	54	2	1-15	47	2	0-19
CHESTERFIELD GENERAL HOSP CHERAW SC 29520	3	33	3-84	5	40	7-77	6	0	1-62				36	8	1-19	27	11	1-25	3	0	0-100	25	8	0-24	24	0	0-45
CLAREDON MEM HOSP MANNING SC 29102	9	11	4-59	7	57	8-70	1	0	0-100	.	.		69	0	1-13	2	0	0-94	2	0	0-100	47	0	1-15	15	0	0-56
COLLETON REGIONAL HOSP- WALTERBORO SC 29488	11	18	5-56	4	50	4-78	9	11	1-50	1	0	0-100	97	2	2-12	24	4	1-27	7	0	0-75	65	3	1-14	37	3	0-18
CONWAY HOSP INC CONWAY SC 29526	14	14	3-50	5	0	3-71	36	6	1-22	19	0	0-89	109	7	2-11	52	8	1-17	24	0	0-85	95	1	1-11	84	4	0-9
OIVINE SAVIOUR HOSP- YORK SC 29745	5	40	3-72	2	0	3-91	.	.		.	.		27	11	1-23	15	13	0-37	1	0	0-100	36	17	1-19	11	0	0-86
EOGEFIELO CO HOSP EOGEFIELO SC 29824	6	0	1-66	4	50	5-79	4	0	0-84	.	.		22	5	1-27	.	.		.			18	0	0-31	8	0	0-72

*Written Comments Not Submitted

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
EDWARD A RONDEAU GENERAL H COLUMBIA SC 29203	SC-33 *	53	2	1-17	.	.		.	.		1	0	0-100	.	.		.	.		.	.		5	20	1-68
ELLIOTT WHITE SPRINGS MEMO LANCASTER SC 29720	SC-34 *	1039	14	10-17	55	40	15-41	70	26	17-39	23	13	5-38	67	16	13-33	56	39	24-50	23	4	3-36	153	20	12-27
ENGLISH PARK MEDICAL CENTE MARION SC 29571	SC-35	201	22	7-18	5	80	4-71	8	38	7-63	4	50	4-78	15	13	6-47	9	89	15-73	15	20	4-46	18	28	6-43
FAIRFIELD MEMORIAL HOSP- WINNSBORO SC 29180	SC-36	257	23	9-20	15	33	7-50	14	36	10-54	7	43	5-64	18	39	10-49	10	60	20-75	14	36	4-46	20	20	7-42
FLORENCE GENERAL HOSP- FLORENCE SC 29501	SC-37	1255	11	7-14	109	23	17-37	47	40	17-43	19	11	9-47	39	21	11-37	23	52	20-59	31	19	8-39	85	18	10-28
GEORGETOWN CO MEMORIAL HOS GEORGETOWN SC 29440	SC-38	1105	12	8-15	64	39	16-40	49	49	16-41	18	11	6-43	67	24	13-34	34	41	23-55	24	13	5-38	105	10	11-28
GRAND STRAND GENERAL HOSP MYRTLE BEACH SC 29577	SC-39 *	1370	11	8-15	122	28	17-37	64	27	16-38	33	6	5-32	59	15	11-32	63	44	26-51	28	14	6-37	92	11	9-26
GREENVILLE GENERAL HOSP- GREENVILLE SC 29601	SC-40 *	21	0	0-37	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
GREENVILLE HOSP- CENTER GREENVILLE SC 29605	SC-41	5549	10	7-13	395	25	16-30	198	29	19-33	111	17	11-29	212	21	15-27	189	32	28-44	80	21	10-31	308	18	12-24
HAMPTON GENERAL HOSP VARNVILLE SC 29944	SC-42 *	300	12	7-16	6	50	10-77	13	15	10-57	8	13	3-58	10	0	6-56	9	89	14-71	14	43	4-47	27	4	5-33
HCA AIKEN REGIONAL MEDICAL AIKEN SC 29801	SC-43	1653	12	9-15	110	36	20-40	77	27	18-39	27	33	7-39	86	15	13-31	69	36	28-52	63	22	9-32	111	14	11-27
HILLCREST HOSP SIMPSONVILLE SC 29681	SC-44	353	17	8-17	18	44	15-57	12	42	11-59	16	6	2-39	23	39	11-45	17	47	21-66	11	18	3-50	43	28	11-36
HILTON HEAD HOSP HILTON HEAD ISLAND SC 29928	SC-45 *	691	8	6-14	59	22	16-40	22	23	9-44	27	11	5-35	25	36	10-43	19	32	17-58	9	11	2-53	49	12	6-28
KERSHAW CO MEMORIAL HOSP- CAMDEN SC 29020	SC-46 *	846	11	8-15	47	38	17-45	41	27	17-45	20	15	3-37	60	13	11-32	30	40	19-53	15	33	3-42	82	9	9-27
LAURENS DISTRICT HOSP LAURENS SC 29360	SC-47	423	15	8-16	24	67	15-52	23	35	13-49	4	25	0-78	21	29	9-44	16	13	18-63	8	0	2-56	40	18	8-33
LEE CO MEMORIAL HOSP- BISHOPVILLE SC 29010	SC-48	165	16	8-19	6	67	8-73	6	67	8-72	1	0	0-100	9	33	7-61	5	100	7-77	6	0	4-67	32	25	9-37
LEXINGTON MEDICAL CENTER WEST COLUMBIA SC 29169	SC-49	2397	11	6-13	166	29	14-30	99	28	16-34	46	9	4-27	117	22	13-28	59	51	26-51	60	13	5-27	189	20	10-24
LIVE OAKS HOSP RIDGELAND SC 29936	SC-50	197	21	10-22	10	60	11-65	10	60	9-61	1	100	3-99	20	25	10-47	8	38	18-78	17	12	7-48	26	23	11-44
LORIS COMMUNITY HOSP- LORIS SC 29569	SC-51	701	12	10-18	29	48	16-50	30	27	13-45	15	13	5-47	37	30	11-39	35	40	21-53	13	8	6-51	101	14	12-29
LOWER FLORENCE CO HOSP- LAKE CITY SC 29560	SC-52	353	14	8-17	13	31	11-58	18	22	11-52	6	17	1-63	31	45	11-40	14	64	14-61	16	25	6-47	30	7	7-35
MARION MEMORIAL HOSPITAL MARION SC 29571	SC-53	559	10	7-15	22	32	15-53	23	35	11-47	11	27	4-52	36	17	10-37	21	29	22-62	22	9	4-38	52	15	7-29
MARLBORO PARK HOSP BENNETTSVILLE SC 29512	SC-54 *	569	11	10-18	24	50	16-53	29	24	14-47	17	41	9-50	49	16	12-36	21	38	21-61	16	13	6-47	57	7	11-34
MARY BLACK MEMORIAL HOSP- SPARTANBURG SC 29304	SC-55 *	1489	8	6-13	113	16	15-34	28	32	17-52	33	12	7-36	60	27	12-33	28	50	21-56	11	18	3-49	97	15	11-28
MCLEOD REGIONAL MEDICAL CT FLORENCE SC 29501	SC-56	2326	11	8-14	145	28	20-39	105	25	18-36	46	43	10-36	99	19	16-33	76	43	27-50	34	15	9-39	147	16	13-28
MEDICAL UNIVERSITY HOSP CHARLESTON SC 29403	SC-57 *	1793	8	5-12	91	18	18-39	18	22	13-53	21	19	6-41	50	30	12-36	41	37	21-50	13	23	6-52	47	19	8-31
MULLINS HOSP MULLINS SC 29574	SC-58 *	706	10	9-17	23	39	15-53	33	30	15-45	3	0	1-81	90	12	14-32	43	37	27-57	3	0	0-83	70	7	9-29

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
EDWARD A RONDEAU GENERAL H COLUMBIA SC 29203	.	.		2	0	1-89	.	.		2	0	0-100	5	0	0-95	3	0	0-100	2	0	0-100	.	.		9	0	0-99
ELLIOTT WHITE SPRINGS MEMO LANCASTER SC 29720	21	38	11-53	16	31	15-61	17	12	3-37	5	0	0-100	132	5	2-10	36	0	0-21	8	0	0-100	82	6	2-12	16	6	0-51
ENGLISH PARK MEDICAL CENTE MARION SC 29571	4	100	2-76	1	100	1-97	1	0	0-100	.	.		20	0	0-30	6	33	0-71	1	0	0-100	14	0	0-43	8	0	0-80
FAIRFIELD MEMORIAL HOSP- WINNSBORO SC 29180	7	29	3-64	9	78	15-73	1	0	0-99	.	.		22	9	0-27	9	22	0-53	1	0	0-100	22	0	0-26	12	8	0-60
FLORENCE GENERAL HOSP- FLORENCE SC 29501	22	18	9-50	6	33	9-75	20	10	1-30	1	0	0-100	131	4	1-9	132	3	1-11	14	0	0-98	83	5	1-12	52	0	0-13
GEORGETOWN CO MEMORIAL HOS GEORGETOWN SC 29440	15	40	8-55	11	27	11-63	12	8	1-42	1	0	0-100	125	6	2-11	72	1	1-15	10	0	0-99	104	3	2-11	49	0	0-20
GRAND STRAND GENERAL HOSP MYRTLE BEACH SC 29577	11	18	10-63	11	45	14-68	52	10	2-19	2	0	0-100	164	2	2-9	70	3	1-15	19	5	0-47	104	2	2-10	66	2	0-11
GREENVILLE GENERAL HOSP- GREENVILLE SC 29601	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
GREENVILLE HOSP- CENTER GREENVILLE SC 29605	40	20	7-41	50	48	21-51	145	6	4-15	243	0	0-3	446	4	3-8	237	3	1-10	50	0	0-35	551	5	3-7	406	1	0-4
HAMPTON GENERAL HOSP VARNVILLE SC 29944	3	67	6-88	1	100	0-97	.	.		1	0	0-100	39	5	2-21	9	22	0-52	.	.		29	10	1-23	10	0	0-64
HCA AIKEN REGIONAL MEDICAL AIKEN SC 29801	14	36	5-52	28	32	17-53	54	7	2-18	28	4	0-79	188	3	2-9	80	3	0-14	19	0	0-94	119	3	2-10	94	3	0-8
HILLCREST HOSP SIMPSONVILLE SC 29681	3	67	2-83	.	.		5	0	0-79	3	0	0-100	52	2	1-15	11	18	0-50	4	0	0-100	35	9	0-18	5	0	0-99
HILTON HEAD HOSP HILTON HEAD ISLAND SC 29928	5	0	2-71	9	33	10-67	17	0	1-33	11	0	0-98	88	1	1-11	50	2	0-19	4	0	0-100	50	2	1-16	59	3	0-14
KERSHAW CO MEMORIAL HOSP- CAMDEN SC 29020	10	10	2-55	3	33	3-84	20	5	1-30	1	0	0-100	110	5	2-12	37	3	0-23	6	0	0-100	69	6	1-12	31	0	0-33
LAURENS DISTRICT HOSP LAURENS SC 29360	5	60	1-72	3	33	4-84	18	17	3-36	6	0	0-100	64	5	2-15	7	0	0-58	.	.		40	8	1-17	27	0	0-28
LEE CO MEMORIAL HOSP- BISHOPVILLE SC 29010	1	0	0-100	3	0	4-84	.	.		.	.		15	0	0-36	4	0	0-82	2	0	0-100	20	0	1-28	5	0	0-98
LEXINGTON MEDICAL CENTER WEST COLUMBIA SC 29169	13	0	3-50	40	35	17-48	49	8	2-19	36	0	0-60	294	3	2-7	148	2	1-11	18	0	0-98	172	8	1-8	115	2	0-7
LIVE OAKS HOSP RIDGELAND SC 29936	.	.		.	.		1	0	0-97	.	.		22	9	0-27	4	0	0-78	1	0	0-100	17	12	1-32	6	17	0-94
LORIS COMMUNITY HOSP- LORIS SC 29569	19	16	8-51	10	30	10-65	2	0	0-98	.	.		92	4	2-13	17	0	2-36	7	0	0-100	87	0	1-11	20	0	0-32
LOWER FLORENCE CO HOSP- LAKE CITY SC 29560	3	67	5-87	10	20	9-63	.	.		.	.		29	0	0-22	11	0	0-45	2	0	0-100	42	2	1-17	9	0	0-93
MARION MEMORIAL HOSPITAL MARION SC 29571	5	20	3-72	5	40	12-83	2	0	0-94	.	.		57	2	1-15	19	5	1-31	6	0	0-100	53	2	1-14	33	3	0-23
MARLBORO PARK HOSP BENNETTSVILLE SC 29512	8	38	6-66	7	43	11-74	13	0	2-42	.	.		60	2	2-15	12	0	0-46	.	.		59	2	2-15	31	0	0-29
MARY BLACK MEMORIAL HOSP- SPARTANBURG SC 29304	14	14	6-54	11	27	13-65	32	13	4-28	65	0	0-19	190	3	2-9	84	5	0-14	18	0	0-96	82	0	1-12	130	0	0-7
MCLEOD REGIONAL MEDICAL CT FLORENCE SC 29501	25	24	6-45	8	75	9-69	74	11	3-17	45	0	0-41	145	10	2-11	63	5	1-15	16	0	0-98	243	7	3-9	253	1	0-4
MEDICAL UNIVERSITY HOSP CHARLESTON SC 29403	30	10	4-40	5	40	6-76	22	27	2-31	198	0	0-4	118	12	4-14	55	2	1-16	9	0	0-100	287	5	3-9	90	0	0-9
MULLINS HOSP MULLINS SC 29574	13	31	7-57	1	0	0-97	2	0	0-93	1	0	0-100	70	3	1-13	13	0	1-40	3	0	0-97	128	0	2-10	11	0	0-55

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
NEWBERRY CO MEMORIAL HOSP- NEWBERRY SC 29108	SC-59	712	12	8-16	27	33	17-52	34	21	14-44	20	20	4-38	53	23	11-33	29	38	24-59	22	23	6-40	57	21	10-32
NORTH GREENVILLE HOSP- TRAVELERS REST SC 29690	SC-60 *	45	0	0-19	.	.		.	.		.	.		.	.		.	.		.	.		.		
OCONEE MEMORIAL HOSP SENECA SC 29678	SC-61	1100	14	9-16	80	31	13-34	57	32	18-42	32	31	7-35	38	32	12-39	41	56	24-53	33	24	8-37	152	24	12-26
ORANGEBURG CALHOUN HOSP ORANGEBURG SC 29115	SC-62	2338	12	8-14	170	25	17-34	92	36	18-37	40	18	7-33	148	25	16-30	85	36	25-47	61	13	8-31	129	19	11-27
PIEDMONT MEDICAL CTR ROCK HILL SC 29730	SC-63 *	1826	11	6-13	99	19	12-32	74	30	16-37	33	24	5-32	78	31	12-31	67	46	24-48	34	24	6-35	143	15	9-23
PROVIDENCE HOSP COLUMBIA SC 29204	SC-64	2708	8	7-13	101	13	15-35	56	20	18-42	18	17	7-45	173	29	16-30	189	26	27-43	21	14	5-39	95	13	10-27
RICHLAND MEMORIAL HOSP- COLUMBIA SC 29203	SC-65	3053	12	8-14	230	31	21-37	100	22	18-37	60	17	7-28	124	19	14-30	58	34	23-49	75	19	11-34	150	20	13-28
ROPER HOSP CHARLESTON SC 29401	SC-66 *	2609	8	8-14	238	17	18-34	95	22	18-38	33	9	7-34	130	15	14-29	72	39	26-49	41	17	9-36	162	13	11-25
SELF MEMORIAL HOSP GREENWOOD SC 29646	SC-67	2635	11	8-14	231	30	16-31	107	35	18-36	63	11	7-27	108	24	16-33	87	39	24-46	58	17	8-32	224	17	10-23
SOUTHLAND MEDICAL CENTER DARLINGTON SC 29532	SC-68	230	11	6-16	5	20	2-68	17	41	10-51	2	0	0-91	10	10	5-54	6	67	13-79	7	14	4-63	24	21	7-40
SPARTANBURG REGIONAL MEDIC SPARTANBURG SC 29303	SC-69	4464	12	9-15	330	32	21-36	169	25	20-35	91	15	8-27	214	23	16-28	189	37	29-45	122	24	12-31	282	19	12-25
ST EUGENE COMMUNITY HOSP- DILLON SC 29536	SC-70	617	9	9-17	13	46	17-67	20	35	12-51	4	25	3-77	39	18	11-38	32	28	24-57	9	44	5-59	98	8	10-27
ST FRANCIS HOSP INC GREENVILLE SC 29601	SC-71	2596	9	7-14	217	20	15-31	66	23	17-40	67	6	7-27	91	19	13-31	79	34	26-48	31	10	6-35	237	20	11-24
ST FRANCIS XAVIER HOSP- CHARLESTON SC 29401	SC-72	2236	9	7-14	202	26	18-35	51	33	17-43	36	11	6-33	104	14	13-30	42	40	25-55	33	15	5-33	139	17	12-27
TRIDENT REGIONAL MEDICAL C CHARLESTON SC 29405	SC-73	2195	12	8-14	145	39	18-36	82	30	20-40	28	29	7-37	107	18	14-30	83	37	26-48	43	19	8-34	156	20	12-27
TUOMEY HOSP SUMTER SC 29150	SC-74	1752	12	9-16	135	22	17-35	104	32	18-36	22	14	5-39	106	23	14-30	71	45	26-50	33	24	7-37	136	15	12-27
US NAVAL HOSP CHARLESTON SC 29408	SC-75 *	1	100	0-100	.	.		.	.		.	.		.	.		.	.			.		.	.	
WALLACE THOMSON HOSP- UNION SC 29379	SC-76	671	17	9-17	35	49	18-50	35	37	15-45	16	25	3-41	64	31	12-33	17	53	19-63	23	30	7-41	82	22	10-29
WHITTEN CENTER HOSP CLINTON SC 29325	SC-77	117	3	1-12	.	.		.	.		3	0	0-89	1	0	3-99	.	.		.			14	7	2-40
WILLIAMSBURG CO MEMORIAL H KINGSTREE SC 29556	SC-78 *	351	12	9-19	14	50	10-56	17	47	13-55	10	0	5-55	23	9	8-41	16	25	20-66	21	19	3-37	27	19	7-37
WILSON CLINIC & HOSP DARLINGTON SC 29532	SC-79 *	484	15	9-17	29	62	15-49	16	38	10-52	11	0	1-47	21	29	10-45	14	36	19-67	13	15	3-46	66	21	12-33

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Oisease			Sepsis			Severe Trauma			Ophthalmology			GI Oisease			Urology			Gynecology			Low Risk Heart Oisease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
NEWBERRY CO MEMORIAL HOSP- NEWBERRY SC 29108	13	31	8-57	10	20	11-66	4	0	0-79	24	0	0-76	78	3	1-12	19	0	1-31	3	0	0-93	61	0	1-13	29	0	0-27
NORTH GREENVILLE HOSP- TRAVELERS REST SC 29690	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
OCONEE MEMORIAL HOSP SENECA SC 29678	8	0	4-62	8	38	9-68	33	6	3-25	8	0	0-100	142	3	1-9	47	2	1-18	15	0	0-99	71	1	1-13	72	1	0-10
ORANGEBURG CALHOUN HOSP ORANGEBURG SC 29115	17	18	7-52	14	36	15-63	66	2	3-18	5	0	0-100	242	4	2-8	166	5	1-11	26	0	0-83	220	8	2-9	131	3	0-6
PIEOMONT MEOICAL CTR ROCK HILL SC 29730	19	21	8-51	14	29	12-59	60	10	2-17	8	0	0-100	231	7	2-8	104	2	1-12	22	5	0-88	179	3	2-8	111	0	0-8
PROVIOENCE HOSP COLUMBIA SC 29204	16	13	6-51	9	22	12-69	23	0	1-27	228	0	0-4	161	5	2-10	55	5	1-17	7	0	0-100	682	6	3-7	51	0	0-13
RICHLANO MEMORIAL HOSP- COLUMBIA SC 29203	59	12	7-37	31	61	20-56	95	16	5-19	146	1	0-5	190	13	4-12	96	15	3-15	30	0	0-21	292	5	3-8	302	1	0-4
ROPER HOSP CHARLESTON SC 29401	12	8	3-52	18	67	16-60	49	6	3-22	4	0	0-100	263	3	2-9	122	2	1-11	33	3	0-57	271	4	2-8	212	1	0-5
SELF MEMORIAL HOSP GREENWOOO SC 29646	36	19	10-45	33	27	17-50	67	0	3-17	20	0	0-89	264	5	2-8	136	2	1-11	42	0	0-82	168	5	2-9	127	0	0-7
SOUTHLANO MEOICAL CENTER OARLINGTON SC 29532	3	33	2-83	1	100	2-98	1	0	0-99	.	.		22	0	0-28	7	0	0-67	2	0	0-100	23	4	1-25	8	0	0-93
SPARTANBURG REGIONAL MEOIC SPARTANBURG SC 29303	43	28	9-42	34	29	22-57	128	13	5-17	67	0	0-17	458	6	3-9	164	7	1-11	31	3	0-51	431	6	3-7	211	1	0-5
ST EUGENE COMMUNITY HOSP- OILLON SC 29536	29	14	9-47	6	50	8-74	15	7	1-37	.	.		68	0	2-14	15	7	1-37	7	0	0-100	76	1	1-12	14	0	0-76
ST FRANCIS HOSP INC GREENVILLE SC 29601	24	4	7-46	20	45	22-65	46	9	3-21	107	0	0-11	397	4	2-8	176	2	1-10	30	3	0-77	195	6	2-9	78	1	0-11
ST FRANCIS XAVIER HOSP- CHARLESTON SC 29401	17	18	7-51	22	50	20-60	43	12	3-23	65	0	0-21	232	3	2-9	135	5	1-11	19	0	0-98	142	5	2-11	213	1	0-5
TRIOENT REGIONAL MEOICAL C CHARLESTON SC 29405	20	10	4-45	30	37	17-52	57	7	2-18	8	0	0-100	253	6	3-9	85	4	1-13	21	0	0-81	227	3	2-8	116	5	0-7
TUOMEY HOSP SUMTER SC 29150	37	22	9-43	25	36	17-55	48	10	3-21	3	0	0-100	211	3	2-9	73	4	1-15	9	0	0-99	114	4	2-11	78	0	0-10
US NAVAL HOSP CHARLESTON SC 29408	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
WALLACE THOMSON HOSP- UNION SC 29379	5	20	5-74	.	.		14	0	1-38	1	0	0-100	83	2	2-12	43	19	2-20	10	0	0-100	44	5	1-16	15	0	0-45
WHITTEN CENTER HOSP CLINTON SC 29325	.	.		.	.		.	.		.	.		10	0	0-53	1	0	0-100	1	0	0-100	.	.		5	0	0-100
WILLIAMSBURG CO MEMORIAL H KINGSTREE SC 29556	4	0	9-86	12	33	14-65	1	0	0-99	.	.		40	0	2-19	11	0	2-46	6	0	0-100	25	8	1-25	9	0	0-86
WILSON CLINIC & HOSP OARLINGTON SC 29532	11	0	10-64	3	67	4-85	1	0	0-99	.	.		49	10	1-17	11	9	0-46	1	0	0-100	77	4	1-12	8	0	0-92

*Written Comments Not Submitted.

Abbeville COUNTY MEMORIAL Hospital

October 27, 1987

Mr. Harvey Brooks
HCFA
Hospital Statistics Quality Review
Hospital Mortality
P. O. Box 26684
Baltimore, Maryland 21207

Dear Mr. Brooks:

In reference to Mortality data for Abbeville County Memorial Hospital, Provider Number 420061, we submit the following comments regarding Mortality data.

Incorrect principle diagnosis data:

[redacted] listed as 4275 should be 425.9
[redacted] listed as 9721 should be 415.1

Deceased within 30 days from last Hospital admission:

The following three patients, [redacted] expired away from the Hospital premises of causes considerably different from the last hospital admission. [redacted] admitted for pneumonia, expired of cardiac arrest; [redacted] admitted COPD, expired of cardiac arrest; [redacted] admitted for dehydration, expired of coronary occlusion. These should be removed from the Hospital Mortality list.

We feel the release of the mortality data is inappropriate as a measure of quality or services that are rendered in a facility. We are a small rural hospital which has a large number of Medicare patients who prefer to be admitted near home during their final illnesses. A review of our cases based upon the age of the patients indicate that 56% of our mortalities were patients with an age greater than 80. Dropping down to those age 70 or greater, accounts for 77% of our mortalities. We do not recall where the Medicare program guaranteed immortality to the beneficiaries; therefore, why should we release data on those that lived there three score and ten years.

Our review of each individual listed indicates that the majority of these patients were very ill. You could have selected any one of several diseases or health problems that

they had as an expected reason for near term death. We expect a high rate of mortality for those with advanced age; however, in looking at one of our younger aged (55) patient we find a chronically ill person who from March, 1985 to September, 1986, was admitted to the hospital 13 times before his death.

The release of this data to the public does a disservice to those in need of healthcare. No amount of clarification or footnotes regarding the methodology or the intended use of this data will reach the non-healthcare professional in an understandable fashion. The key word, death rates (mortality rates), is all that will be retained as they review the data. This data release serves no purpose in improving the quality of care as it does not measure quality and has a tendency to mislead. We currently deal with a few families who wish to take Mom or Dad, Aunt or Uncle, to the leading tertiary medical centers in the area without consideration of the family members wish as outcome. Now with the added misinformation of the mortality outcome, we will see more of a disservice to these individuals whose health outcome will not necessarily be changed by where they receive service, but could finish their last few days of life in their home community near their family and friends.

Sincerely,

Brad D. Ingram (sm)

Brad D. Ingram
Administrator

BDI/sm

GREENVILLE HOSPITAL SYSTEM
701 Grove Road
Greenville, South Carolina 29605

October 19, 1987

William L. Roper, M. D., Administrator
Health Care Financing Administration
Hubert H. Humphrey Building, Room 314-G
200 Independence Avenue, S. W.
Washington, D. C. 20201

Dear Dr. Roper:

On behalf of Allen Bennett Memorial Hospital Medical Staff, Administration, and the citizens of the Greer and surrounding communities, I welcome the opportunity to comment on the Health Care Financing Administration's 1986 mortality data.

Although the mortality rates for Allen Bennett Memorial Hospital are within the parameters predicted by HCFA, I have considerable concern that the methodology used for computing the statistics does not adequately reflect the high quality of care provided within our hospital. I am pleased to note that in the 8/17/87 Federal Register HCFA acknowledged that the data are not, in themselves, measures of hospital performance but "simply one indicator of potential quality distinctions among hospitals." Therefore, under no circumstances should the mortality rates be used as the basis for judging the quality of care provided by different hospitals or for making comparisons among hospitals.

Specific concerns regarding the methodology are as follows:

1. Statistics were developed directly from billing information rather than from individual patient medical records. HCFA is aware of the limitations and notes, "...our model for predicting a particular hospital's expected mortality rate is limited by the kinds of information available to us on Medicare bills and general information on the hospitals involved."

2. The most important factor in developing meaningful mortality data, severity of illness, was not considered. Once again, HCFA's awareness of this factor is evidenced in the statement, "Not all of the factors affecting the probability of death in a particular case, most notably severity of illness, are included..."

3. Statistics are especially unreliable for small hospitals because, as HCFA admits, "the smaller the number of admissions, the less

reliable are the statistics, ..." Such is the case with Allen Bennett Memorial Hospital and others. Because of the small number of patients treated, one or two deaths (additional or less) significantly affects the overall mortality rate and even more so the individual diagnostic category rates.

4. The way in which the information was collected and is reported imply reasons or causes of death. Actually, the categories listed are classifications of the reason for admission.

5. Contributing factors to death occurring after discharge were not considered. Death may have been the result of an accident or a condition totally unrelated to the reason for hospitalization. Also, care rendered after discharge is important. Non-compliance with prescribed medical regimen in a nursing home or in the patient's home would of course adversely affect the well-being of the patient. Retrievability of such information by hospitals is difficult, if not impossible. Additionally, hospitals are unable to verify all deaths reported to have occurred after discharge did in fact occur.

It is of utmost importance that the lay public understand that the predicted mortality range developed for each hospital was mathematically computed based on age, sex, prior hospitalizations, transfer status, and complicating medical conditions of the actual patients treated at the hospital. As a result, predicted ranges will differ among hospitals, and should not be misconstrued as reflecting the probability of death if treated at a given hospital. Allen Bennett Memorial Hospital services an older Medicare population with multiple complicating medical conditions. According to the most recent information provided by the National Center for Health Statistics, the average life expectancy for females in South Carolina is 76 and for males is 68. The average age for Allen Bennett Memorial Hospital patients included in the HCFA listing is 82. Understandably, the mortality rates may be slightly higher than those of neighboring hospitals whose patients may be somewhat younger.

The effort to focus on quality of care provided to the nation's Medicare beneficiaries is laudable. As HCFA perfects its techniques of data collection, computation and reporting, the users of health care services will be assisted in evaluating the quality of care provided by individual institutions and practitioners. However, until such perfection is realized, data such as mortality rates serve only to raise question and very possibly create confusion in the minds of our nation's citizens.

Sincerely,

Michael W. Massey

Michael W. Massey, Administrator
Allen Bennett Memorial Hospital
#420033

ANDERSON MEMORIAL HOSPITAL
800 North Fant Street • Anderson, South Carolina 29621 • (803) 261-1000

October 27, 1987

William L. Roper, M.D.
Administrator
Department of Health and
Human Services
Healthcare Financing Administration
Washington, DC 20201

Attention: HCFA Mortality Comments

Dear Dr. Roper:

RE: Mortality Comments
Anderson Memorial Hospital
Anderson, SC 29621

Our hospital appreciates the opportunity to comment on the mortality information about Medicare patients treated at our hospital in 1986. The data provides yet another tool to enhance the program of patient care evaluation in place as part of our institution-wide quality assurance program. While we agree with HCFA that the information on its own is not a complete measure of the quality of care at an individual hospital, we believe that it is useful and will be more so when additional statistical measures to deal with complex issues such as severity of illness are developed.

The present data documents actual mortality rates in 17 categories to be within the accepted ranges for Anderson Memorial Hospital. Nevertheless, the data has been assimilated into our regular hospital quality control programs to identify areas for review.

Our hospital management, medical staff, and governing board have been appraised of this information. The hospital Quality Coordinating Council has recommended that the mortality data be used in the presently established review programs. It has already proven to be a useful screening tool for focusing peer review in a number of our clinical departments. It is only through review by trained hospital quality review professionals that cases can be selected for peer review by our medical staff. It is here that judgements regarding the quality of care and appropriateness of medical practice can be determined.

Death is only one of many possible outcomes of treatment, and mortality review is only one of several important components of our hospital's comprehensive quality control program. Such programs are designed to enhance patient safety, promote appropriate utilization of resources, and reduce the probability of preventable adverse clinical outcomes. Moreover, the value of a quality assessment method lies in its ability to identify remediable deficiencies in patient care for which corrective action can be instituted.

Anderson Memorial Hospital is proud to have in place a comprehensive and systematic review and evaluation process. The hospital quality assurance plan has been reviewed on a regular basis by the Joint Commission of health care organizations and other external review organizations. Anderson Memorial Hospital has consistently met the high standards required for accreditation.

These comments and actions demonstrate that quality of care is of the utmost concern to Anderson Memorial Hospital's governing board, management, and medical staff. The hospital will be pleased to meet with interested parties for the purpose of sharing information about this hospital-wide quality assurance program.

Thank you for the opportunity to provide comments on this data, I am

Sincerely yours,

FG Jones

Frederic G. Jones, M.D., FACC
Executive Vice President/Medical Affairs

FGJ/sdb

BAPTIST MEDICAL CENTER EASLEY

BMCE

P O Box 687
Fleetwood Drive
Easley, South Carolina 29641
(803) 859-6365

October 29, 1987

Mr. Harvey Brooks
HCFA
Health Standard & Quality Bureau
2D2 Meadow East Bldg.
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Mr. Brooks:

After reviewing the data sent to us, we are returning our response to you.

Please note that we found the enclosed noted discrepancies. We ask that you correct your information before releasing it in December.

Sincerely,

Libby Fowler

Libby Fowler
Director of Public Relations

Enclosures

cc: Baptist Medical Center Columbia
Karen Reeves
Kay Wood
Roddey Gettys

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

BAPTIST MEDICAL CENTER EASLEY
EASLEY, S.C.
HOSPITAL =420015

	DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
	ALL CAUSES	997	13%	8 TO 15%
CA	CANCER	84	17%	15 TO 37%
CE	CEREBROVASCULAR ACCIDENTS	27	36%	13 TO 45%
EY	OPTHALMOLOGIC DISEASE	21	0%	0 TO 88%
GC	GASTROINTESTIONAL CATASTROPHIES	19	27%	7 TO 42%
GI	GASTROINTESTIONAL DISEASE	106	2%	2 TO 11%
GU	UROLOGICAL DISEASE	101	6%	1 TO 13%
GY	GYNECOLOGICAL DISEASE	10	0%	0 TO 94%
HL	LOW RISK HEART DISEASE	71	13%	1 TO 12%
HM	SEVERE CHRONIC HEART DISEASE	45	20%	11 TO 35%
HS	SEVERE ACUTE HEART DISEASE	33	53%	19 TO 50%
ME	METABOLIC DISTURBANCES	29	10%	5 TO 35%
OP	ORTHOPEDIC DISORDERS	50	0%	0 TO 19%
PN	PULMONARY DISEASE	87	27%	10 TO 27%
RN	RENAL DISEASE	9	11%	3 TO 59%
SE	SEPSIS	8	50%	16 TO 77%
TR	TRAUMA	26	11%	1 TO 25%

THESE ARE THE ERRORS WE FOUND PER CATEGORY:

HS 1 PATIENT'S DEATH WAS LONGER THAN 30 DAYS PAST HOSPITALIZATION
1 CAUSE OF DEATH WAS UNRELATED TO PRINCIPAL DIAGNOSIS

PN 1 CAUSE OF DEATH WAS UNRELATED TO PRINCIPAL DIAGNOSIS

HM 1 CAUSE OF DEATH WAS UNRELATED TO PRINCIPAL DIAGNOSIS

TR 2 CAUSES OF DEATH WAS UNRELATED TO PRINCIPAL DIAGNOSIS

UN 5 PATIENTS WITH CAUSE OF DEATH UNRELATED TO PRINCIPAL DIAGNOSIS
1 PATIENT DIED IN 1987 NOT IN 1986
1 PATIENT DIED AS AN INPATIENT AT GREENVILLE MEMORIAL HOSPITAL
1 PATIENT WAS HIT BY A CAR

CA NO CHANGE

CE 2 PATIENTS IDENTIFIED PER YOU WITH THE SAME IDENTIFICATION NUMBER, AGE, DATES OF SERVICES, ETC. WITH THE ONLY DIFFERECE BEING DIFFERENT LAST NAME.

GC 1 PATIENT DEAD ON ARRIVAL TO GREENVILLE MEMORIAL EMERGENCY ROOM
2 CAUSES OF DEATH WERE UNRELATED TO PRINCIPAL

Barnwell Regional Hospital

P.O. Box 588
Reynolds Road
Barnwell, South Carolina 29812
Tel. (803) 259-3571

October 23, 1987

Mr. William L. Roper
Administrator
Healthcare Financing Administration
Health Standard & Quality Bureau
Hospital Mortality Information
P.O. Box 26884
Baltimore, Maryland 21207

Re: Barnwell Regional Hospital, Barnwell, SC
Medicare Provider #570823313

Dear Mr. Roper:

Thank you for giving us an opportunity to review the data on mortality rates before it is released to the public. Barnwell Regional Hospital is a full service, fifty three bed acute care hospital offering among other services, surgery, obstetrics, pediatrics, and general medicine. We are proud of our hospital and physicians and feel this information confirms that even with the many older patients we receive, an outstanding job is being done. The hospital has a hospital wide Quality Assurance Program and this information will be analyzed by them.

The data used by HCFA indicates that a total of 303 Medicare patients were admitted to Barnwell Regional Hospital in 1986; however, our records indicate that there was a total of 465 Medicare admissions in that year. Sixty three of the 303 patients died either in our hospital or within thirty days of admission. We found that one patient, [redacted] was admitted as reported by HCFA on 10-05-86 except that our records show an admission date of 09-10-86. You reported a principle diagnosis of 1622 and we had a principle diagnosis of 486. This patient was a skilled nursing home patient in our swing bed program. Another patient, [redacted] had a principle diagnosis according to you of 4340 and our records show the principle diagnosis to be 428. Of these sixty three patients, ten, (16%), did not die in our hospital. Three of these patients, [redacted] and [redacted] were transferred to other hospitals. You need to determine if these patients were also counted against the other hospitals.

Two of these patients were transferred to nursing homes, and five were discharged home. The overall average age of the sixty three patients was 79 years of age. Of the sixty three patients, eight, (13%), were in our swing bed program because there exists a shortage of skilled nursing home beds in our county. Of course, the expected mortality rate on these patients is 100%.

In all of the fifteen categories of DRG's, Barnwell Regional Hospital was within your predicted range for mortality rates; however, you reported that of 303 cases, our total mortality rate was 22% and the predicted range was 11-21%. It does not seem possible statistically for all of your fifteen categories to be within range and yet the total be 1% out-of-range. In fact, if you divide 63 by 303, you get 20.77%. Also, if one takes out the ten that did not die in our hospital, the rate drops to 17%. If one takes the eight patients in the skilled swing bed program, the percent is 18%. If you take out both categories, it drops to 15%.

Sincerely,

John R. Eckert

John R. Eckert
Executive Director

JRE:rrm

cc: Medical Staff
QA Committee

CANNON
MEMORIAL
HOSPITAL

October 21, 1987

Dr. William L. Roper, Administrator
Department of Health and Human Services
Washington, D.C. 21207

Medicare Provider No. 42-0011

Dear Dr. Roper:

The following information or comments pertinent to the cause of death of patients identified with Cannon Memorial Hospital should be used in their entirety because the lay public may not understand medical terminology when used to describe extenuating circumstances surrounding the death of a patient.

Causes	Cases	Mortality Rate	Predicted
- CA - Cancer	20	8 deaths - 40%	14 - 54%

Comment: Five of eight deaths were over 70 years of age. All eight patients were "Do Not Resuscitate" as desired by patient or family.

Causes	Cases	Mortality Rate	Predicted
- CE - Cerebrovascular Vascular Accidents (strokes)	22	8 deaths - 36%	13 - 50%

Comment: Five of eight patients 80 years old or older. Seven of eight patients were "Do Not Resuscitate" as desired by patient or family. Four of the eight deaths had previous "strokes". One patient died of sepsis (blood infection); one patient died of lymphoma (form of cancer) and sepsis. Seven of the eight patients had suffered C.V.A. prior to admission.

Causes	Cases	Mortality Rate	Predicted
- EY - Ophthalmologic Disease	1	1 death - 100%	0 - 100%

Comment: Not an EY admission. Patient admitted with visual hallucinations. Actual cause of death third degree heart block, diabetes (out of control), previous stroke, gangrene with recent amputation and previous heart attack.

-- continued --

P.O. BOX 188, PICKENS, SC 29671 - (803) 878-4791

Causes	Cases	Mortality Rate	Predicted
- GC - Gastrointestinal Catastrophy	10	2 deaths - 20%	2 - 50%

Comment: Both patients were admitted with multiple comorbidities (congestive heart failure, marked chronic obstructive pulmonary disease and chronic pyelonephritis [kidney disease]). Patients were 83 and 69 years old.

Causes	Cases	Mortality Rate	Predicted
- GI -Gastrointestinal Disease	39	3 deaths - 8%	1 - 18%

Comment: Patients' ages were 78, 92 and 95. All three expired because of comorbidities, i.e. massive pulmonary embolism, cancer of the pancreas, and congestive heart failure.

Causes	Caases	Mortality Rate	Predicted
- GU - Urologic Disease	48	2 deaths - 4%	1 - 18%

Comment: Both patients had multiple comorbidities (illnesses) and both expired with sepsis complicated by C.V.A. (strokes) or recurrent pneumonia, mental retardation (severe) and chronic obstructive pulmonary disease.

Causes	Cases	Mortality Rate	Predicted
- GY - Gynecologic Disease	7	0%	0 - 100%
- HL - Low Risk Heart Disease	50	2 deaths - 4%	1 - 14%

Comment: Patients had comorbidities (other medical problems of significant nature), i.e. diabetes and hypertension, chronic schizophrenia, documented medical non-compliance, recent extensive heart attacks. One patient that expired was miscoded and should have been admitted "Severe Heart Disease".

Causes	Cases	Mortality Rate	Predicted
- HM - Severe Chronic Heart Disease	18	3 deaths - 17%	8 - 46%

Comment: All three patients were over 89 years old. All three were "Do Not Resuscitate" because of severity of illness.

-- continued --

Causes	Cases	Mortality Rate	Predicted
- HS - Severe Acute Heart Disease	16	7 deaths - 44%	17 - 61%

Comment: Four of seven were 83 years old, 6 of 7 were over 70 years old, two were "Do Not Resuscitate" because of severity of illness. Six of seven had comorbidity, i.e. severe peripheral vascular disease, hypertension, diabetes, chronic obstructive heart disease and previous heart attack and sepsis (blood infections).

Causes	Cases	Mortality Rate	Predicted
- ME - Metabolic Electrolyte Disturbances	6	1 death - 17%	3 - 65%

Comment: Patient expired in V.A. hospital with lung cancer after discharge from Cannon Memorial Hospital.

Causes	Cases	Mortality Rate	Predicted
- OP - Orthopedic Disorders	17	2 deaths - 12%	0 - 54%

Comment: One patient died at home of third degree heart block and pulmonary embolus (blood clot). Both patients suffered from multiple illnesses, i.e. hypertension, vascular insufficiency, or previous amputation. Both patients 75 years old.

Causes	Cases	Mortality Rates	Predicted
- PD - Pulmonary Disease	62	11 deaths - 18%	12 - 34%

Comment: Seven of 11 patients were 85 years old, eight of eleven were admitted from nursing homes, 9 of 11 were "Do Not Resuscitate". All had multiple illnesses, i.e. COPD, Chronic Brain syndrome, Heart Disease, Diabetes, C.V.A. (stroke), cancer and/or Alzheimer's Disease.

Causes	Cases	Mortality Rates	Predicted
- RD - Renal Disease	1	1 death - 100%	1 - 97%

Comment: Patient was 87 years old, multiple comorbidities, recent heart attack, cancer of the colon with metastasis, COPD and heart disease.

-- continued --

Causes	Cases	Mortality Rates	Predicted
- SE - Sepsis	4	1 death - 25%	5 - 80%

Comment: Patient was 93 years old, admitted from nursing home with comorbidities, i.e. arteriosclerotic heart disease, hypertension, and diabetes.

Causes	Cases	Mortality Rate	Predicted
- TR - Severe Trauma	8	1 death - 13%	1 - 54%

Comment: Alzheimers Disease patient admitted from nursing home with urethral trauma from pulling catheter out. Cause of death was cardiac arrest at nursing home after discharge from hospital.

Sincerely,

James A. Uzzell
Administrator

JAU:bb

Charleston Memorial Hospital

326 Calhoun Street • Charleston, South Carolina 29401 • (803) 577-0600

Mr. Lynn W. Beasley
Administrator

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
William Roper, M. D.
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

An evaluation of the HCFA mortality information revealed that Charleston Memorial Hospital fell within the predicted range of mortality rates for the Medicare population during the year 1986. Of significance, however is the fact that although we fell well within the low to mid range in the individual diagnostic categories we fell at the top of the range for all causes. Is this an artifact of the statistical techniques which HCFA has not released?

Charleston Memorial is a county facility which primarily serves the lower income residents of Charleston County. Most of our patients do not have a private physician and tend to neglect their health status or do not follow through with prearranged clinic care. Upon admission we find that our patients have multiple medical problems thus complicating their admission. Noncompliance with their plan of treatment, i.e. medication, diet, sobriety etc., is another major factor in our readmission rate and ultimate outcome of the patient. In many cases when our medicare patient could be placed in a nursing home for conditions where skilled care would be appropriate the shortage of nursing home beds and the lack of family support tends to increase our length of stay and the patient lives his/her final days in the care of Charleston Memorial Hospital.

SPECIFIC CONCLUSIONS OF OUR REVIEW:

1. The date of death for patient [redacted] is recorded as 7/26/86 but actual date of death is 7/22/86.

2. Due to a keying error in our billing department during 1986, (secondary diagnoses were submitted instead of the principal diagnosis) 12.9% of the identified medicare deaths were incorrectly categorized. Therefore there are 14 disagreements with the HCFA's principal diagnoses (cause of death). This keying error was identified and resubmitted in 1986.

3. 94.4% of the identified medicare deaths had comorbid conditions/complications that played a major role in their health status.

4. 30.1% of the deaths were expected (patients were admitted in terminal stage of disease process) and orders were written not to resuscitate the patient as requested by patient and family members. An additional 30% had poor prognosis during hospitalization and prior to death.

5. 17.5% or in 19 cases the cause of death (principal diagnosis) as identified by HCFA was not the actual case of death. Cases were found where the admission occurred with a diagnoses of; dehydration with the underlying cause of death being cancer, cholecystectomy but had a Myocardial Infarction during hospitalization, and a person with pneumonia who developed sepsis, are just a few examples.

As you have indicated, the HCFA data is not indicative of hospital performance. Even though this data is a beginning, the HCFA model fails to consider a wide range of factors with a significant impact on mortality including the patient's general health status, the stage of the patient's illness, the patient's economic and psychological condition and family support. Moreover, the HCFA model focuses upon Medicare population, (for the elderly) thus expected mortality is higher among the elderly and does not generate a true picture of Charleston Memorial Hospital's overall lower mortality rate.

Charleston Memorial Hospital maintains an ongoing monitoring progam which assures quality and appropriateness of care including mortality review. Additionally, we have a strong concurrent utilization review process which assures the prevention of under utilization of hospital resources. Thank you for sharing this data with us and for providing an opportunity to help you correct the errors. It is encouraging to know that our mortality is well within the predicted range.

Sincerely,

Lynn W. Beasley
Administrator

Chesterfield General Hospital
Medicare Provider
42-00-62

P O Box 151
Highway #9 West
Cheraw, South Carolina 29520
(803) 537-7881

October 26, 1987

William L. Roper, MD
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

While we appreciate HCFA's interest with the respect to the provision of quality health care to Medicare patients, it is our opinion that the Medicare mortality data is misleading and an inadequate measure of quality of healthcare.

The methodology used to determine mortality rates was not developed to monitor hospital quality mortality factors. As you know, it was developed to monitor Medicare billing. Therefore, as a model for measuring and analyzing mortality rates, it is simply not viable. Conclusions drawn from this data would be misleading at its best. In addition, Medicare mortality rates reveal why a patient was admitted to the hospital and not why a patient died. For example, over half the Medicare patients on the mortality list at this hospital were dying patients admitted in the final stages of their illness.

The following is a detail of our review of the data used by HCFA:

Data Verification

The data used by HCFA indicates that a total of 64 Medicare patients admitted to Chesterfield General Hospital died within 30 days of admission. Of these, 47 died while still a patient within the hospital while 17 died after discharge. Our records indicate that 650 Medicare admission occurred in 1986. Presumably, the discrepancy reflects multiple admission of individual beneficiaries to different hospitals.

Our own records indicate that of the 64 Medicare patients who died within 30 days of admission, 12 were still alive at the time of discharge. Through several hours of hospital personnel time, we were able to verify all 12 deaths. Of these 12 deaths, 6 occurred in a nursing home, 4 died at home, and 2 died in another hospital. Refer to paragraph on interpretative remarks for specific information concerning these 2 cases. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

a subsidiary of HCA The Healthcare Company

Interpretative Remarks

In the Cancer diagnostic category, the hospital's actual mortality rate falls outside the range of the predicted mortality of 12 to 49%. After correcting the error in the death recording, the actual mortality rate in this category dropped from 55% to 50%. The error is attributed to HCFA listing a patient in which this hospital received no Medicare reimbursement. Although the patient had Part A, he was employed full time and was covered by commercial insurance. At the time of hospitalization, the patient was on employer disability [redacted]

Other errors noted in the data report is the listing of two patients who actually expired in other hospitals and not at Chesterfield General Hospital. Both of these deaths were verified with the other facilities in question and are as follows:

[redacted] Expired at Providence Hospital, Columbia, S.C.
[redacted] Expired at McLeod Regional Medical Center, Florence, S.C.

Therefore with subsequent recalculation in the actual mortality rate in the Unknown and Severe Acute Heart Disease Categories, the actual mortality will be less than what was reported.

In analyzing the background characteristics of this population, it is very interesting to note the following:

1. Of the 64 deaths, 41 cases had a least one comorbidity. Out of the 41, 19 cases had at least two or more comorbidities.
2. 38 of the 64 patients were receiving "palliative care measures" in which death was expected. Family agreement was considered in the "No Code" orders. Twenty seven of these cases had a least one comorbidity.
3. In reference to length of stays, 19 who died in the hospital were hospitalized 3 days or less and 14 of these had LOS 24 hours or less. One other patient admitted for blood transfusions (LOS equal to or less than 24 hours) was discharged and expired outside of the hospital.
4. The average age is 82.6.

Other documentation errors identified included incorrect admission, discharge or death dates:

[redacted] Actual death date 11/14/87
[redacted] Actual death date 3/18/86
Actual admission date 1/26/86
Actual discharge date 5/29/86
Actual death date 11/22/86
Actual death date 8/29/87 (Pt. died in another hospital)
[redacted] Actual death date 4/27/86

The only keying error that can be attributed to this facility is in the case of [redacted] I also would like for you to note that [redacted] died in another hospital.

In conclusion, Chesterfield General Hospital, which is accredited by the Joint Commission, is totally committed to providing quality care for all patients. This facility has an active and aggressive quality assurance program which evaluates provided healthcare services to all patients on an ongoing basis.

Sincerely,

Lance C. Labine
Administrator

LCL:jr

Enclosure

ENCLOSURE

Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	10	2	12	0
CE -- Cerebrovascular Accidents	7	1	7	1
GC -- Gastrointestinal Catastrophes	0	0	0	0
GI -- Gastrointestinal Disease	3	0	3	0
GU -- Urologic Disease	2	1	2	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	1	1	1	1
HM -- Severe Chronic Heart Disease	4	0	4	0
HS -- Severe Acute Heart Disease	2	2	2	2
ME -- Metabolic/Electrolyte Disturbances	4	0	4	0
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	10	3	10	3
RN -- Renal Disease	1	0	1	0
SE -- Sepsis	1	1	2	0
TR -- Severe Trauma	0	0	0	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	2	6	4	4
Total -- All Categories	47	17	52	12

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

Colleton Regional
Hospital

October 26, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health and Human Services
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Colleton Regional Hospital appreciates the opportunity to comment on the upcoming publication of mortality information on Medicare patients. We are concerned about mortality and the quality of care. Patients and their families have a right to all information that can help them make informed decisions on choosing a hospital. However, publication of mortality rates will provide an opportunity for misinterpretation and misuse of the information.

We feel that the mortality rates should not be used as the only indicator to judge the quality of hospitals. The Medicare mortality rates indicated in this comparison were derived from information developed from Medicare billing data and do not necessarily indicate the quality of care. This occurs because the Medicare billing information reflects why the patients were admitted to the hospital and do not necessarily reflect the specific reasons for cause of death. Also, in recent years the severity of illness of patients that are admitted to the hospital is much higher than in prior periods. Oftentimes, a patient is admitted in the final stages of their illness and the expected outcome for that patient is poor and may even be death. Also, the information reflected by the Medicare mortality rates are indicative of the older population segment in the country, and it may not have a correlation to the overall mortality rates for each hospital.

In our specific review of the data released by HCFA, our records indicate discrepancies in the actual cause of death compared to the classification by HCFA. Our review of the records also indicated that several patients whose death were attributed to Colleton Regional Hospital had been treated for severe diseases at other institutions. When death was eminent and further treatment impossible or not desired, those patients were brought back to our hospital

501 Robertson Boulevard
Walterboro, South Carolina 29488
Tel. (803) 549-6371

in order to be closer to family and friends. In these cases, the death was an expected outcome at the time of admission. These discrepancies reinforce the points regarding reliance on mortality rates alone.

Colleton Regional Hospital is committed to providing excellent quality care to each and every patient. That commitment is evident in the quality assurance activities that are ongoing throughout the hospital. The hospital is accredited by the Joint Commission of Healthcare Organizations and they have always required mortality review as part of its medical staff standards for monitoring the quality and appropriateness of care. The hospital has established a quality assurance plan that requires the medical staff, all departments within the hospital, administration and board to plan and develop a systematic process for monitoring and evaluating the quality and appropriateness of care for patients. It is through these activities that the quality of care provided at a hospital can be monitored. No one indicator, such as mortality rates, can provide a valid indication of the quality care given at an institution. One must consult their family physician and be familiar with the type of care rendered at each hospital. It is imperative that the public be informed about healthcare matters in order to make valid decisions regarding their well-being. However, the use of mortality rates should not be the only factor considered.

Sincerely,

Charles Mitchener
Administrator

lv

Divine Saviour Hospital and Nursing Home
111 SOUTH CONGRESS STREET
YORK, SOUTH CAROLINA 29745

October 27, 1987

JOHN W. BAILEY
Administrator

Mr. Harvey Brooke
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Re: Mortality Data
Hospital ID No. 42-0032

Dear Mr. Brooke:

This is to advise you that [redacted] is very much alive and well and is seeing her physician regularly. This being the case, I would appreciate very much if you would remove this person from our mortality listing and, also, in fairness to a small institution recalculate our percentage.

Sincerely,

DIVINE SAVIOUR HOSPITAL

John W. Bailey
Administrator

kj

c Congressman John Spratt
Karen Reeves, SCHA

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

EDGEFIELD
COUNTY
HOSPITAL

An Affiliate of Self Memorial Hospital

P. O. Box 590, Edgefield, South Carolina 29824

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Washington, D.C. 20201

Re: Edgefield County Hospital
Provider Number: 42-0075

Dear Dr. Roper:

Edgefield County Hospital acknowledges the release of mortality information from the Health Care Financing Administration (HCFA). It is good to see HCFA take an interest in quality assurance, something that all hospitals and specifically this hospital, have been interested in for many years.

Internally, the hospital has a Quality Assurance Committee which reviews the performance of all hospital departments, a Professional Activities Committee which reviews physician performance, a Safety Committee which reviews the overall safety of plant and facility, and a Hospital Relations Committee which reviews pharmacy and therapeutics, the Medical Staff Bylaws, and other facets of the institution. All of these committees report to and through the Edgefield County Hospital Medical Staff to the Hospital's Governing Body. Externally, the hospital has been continuously accredited by the Joint Commission on Accreditation of Hospitals since 1978, and annually must undergo a survey by the South Carolina Department of Health and Environmental Control to assure its licensure.

ECH believes that consumer access to valid and useful information on the quality of hospital care is important, but it also feels that the public needs to be aware of the limitations of the HCFA data.

First, the data assumes that each hospital's patients are average except with respect to the few characteristics included in the statistical model. The model does not include measures of how ill the patient was at the time of admission, whether the patient had a terminal illness, or the patient's psychological state or general health status. For instance, ECH falls out of the anticipated range for the diagnosis of cancer (CA). What this does not tell, is that for this diagnosis there were three patients at ECH, all of whom were admitted to the hospital terminally ill. The patients' families requested that their loved ones be allowed to pass with dignity.

Second, the data is not all inclusive. The mortality rates apply only to Medicare patients.

ECH agrees with your comment that the information on its own is not a complete measure of quality of care and should not be used by itself to make judgements about the quality of care at an individual hospital.

The American Hospital Association and the Joint Commission are investigating methods of evaluating hospital quality that rely on measures other than mortality rates and our hospital looks forward to the results of these efforts. All information, whether it be disseminated by the Healthcare Financing Administration, the American Hospital Association, or the Joint Commission will be used in the hospital's quality assurance process to assure that it provides quality healthcare for the citizens of Edgefield County.

Sincerely,

Richard H. Satcher
Administrator

RHS:nd

English Park
Medical Center

October 27, 1987

Mr. Harvey Brook
Asst. to Director of Health Standards
and Quality Bureau,
HCFA
2-D-2 Meadows East Building
6325 Security Boulevard
Baltimore, MD 21207

Dear Mr. Brook,

The HCRA hospital specific mortality survey is an interesting statistical study, however, because of the often misleading nature of raw statistics, pertinent conclusions can only be drawn on the basis of the factors contributing to the final outcome.

During the past several years, English Park Medical Center has voluntarily instituted strict admission guidelines adopted by the Federal government. These guidelines restrict the justification for admission of Medicare patients to more acutely ill individuals than they have in the past.

Because English Park Medical Center has medical staff members serving in the capacity of Medical Directors for 13 area nursing homes, this of course contributes a high ratio of more severely ill Medicare patients to the general census as they are admitted to the hospital. In 1986, nursing home patients accounted for 38% of patient deaths experienced by this facility. This is the largest and most consistent mortality factor in considering this data.

At a time when mortality statistics are attracting close scrutinization, many hospitals would prefer not to service this aging population sector, however, the basic philosophy at English Park Medical Center is to render quality care to all patients regardless of age or financial classification - and we will continue to do so in the future.

Sincerely,

Tony Skorput

Tony Skorput
Executive Director

TS/sdd

FAIRFIELD MEMORIAL HOSPITAL
P. O. BOX 620 ■ WINNSBORO, S. C. ■ (803) 635-5548

October 20, 1987

William L. Roper, M.D.
Administrator
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

The Health Care Financing Administration Mortality Release does not reflect the quality of care rendered to Medicare beneficiaries at Fairfield Memorial Hospital. The categories listed reflect the diagnosis for admission, not the cause of death. The HCFA methodology has not been validated and the reliability is at best limited. The methodology used to determine expected mortality ranges has not been released to the public or the hospitals and cannot be reproduced.

HCFA rated only five variables contributing to expected mortality - age and sex of the patient, the number of prior hospitalizations within the year, whether the patient was transferred from another hospital, and whether the patient has selected co-morbid illnesses. Many other variables affect mortality, i.e., severity of illness and patient desire for no heroic measures. The model does provide accurate and reliable estimates of the relationship between each of the five patient characteristics included in the model and the risk of death. Whether these are the most significant factors influencing the risk of death is unknown, but the limited ability of these factors to explain differences in mortality rates between hospitals suggests that they are not.

The Quality Assurance Program at Fairfield Memorial Hospital is a program designed to promote and maintain the highest quality of health care. Each hospital admission is reviewed by a registered nurse utilizing quality of care criteria developed by the Medical Staff. All deaths and any case requiring further review is referred to a physician reviewer and presented to the Medical Executive Committee.

TECHNICAL ASPECTS OF DATA:

In each category there are less than 30 cases which mathematically make the statistics unreliable. The number of cases listed by HCFA is the number of Medicare beneficiary patients we had in the hospital on an inpatient basis for the year 1986. It is not the number of Medicare admissions, as is the number of cases listed by each category.

In the category of cancer, the actual number of patients was fifteen. Out of those fifteen, four were deaths; in cerebrovascular accidents: fourteen patients, five deaths; in gastrointestinal catastropohies: seven patients, three deaths; gastrointestinal disease: twenty-two patients, two deaths; urologic disease: nine patients, two deaths; gynecological disease: one patient, no deaths; low risk heart disease: twenty-two patients, no deaths: severe chronic heart disease: eighteen patients, seven deaths; severe acute heart disease: ten patients, six deaths; metabolic/electrolyte disturbances: fourteen patients, five deaths; orthopedic disorders: twelve patients, one death; pulmonary disease: twenty patients, four deaths; renal disease: seven patients, two deaths; sepsis: nine patients, seven deaths; severe trauma: one patient, no deaths. All of the deaths did not occur in the hospital.

If Fairfield Memorial Hospital transferred a patient to a veterans' hospital, psychiatric, rehabilitation, or nursing home facility or a swing bed, and the patient died at that facility, the death was still counted against Fairfield Memorial Hospital. The patients that were discharged from Fairfield Memorial Hospital either went to a nursing home, into the care of Home Health, or were discharged home. The following is a list of these statistics:

Cerebrovascular accidents: Two of the five were discharged, one put in the care of Home Health, and one transferred to the nursing home.

Gastrointestinal disease: Of the two deaths, one was discharged home and one transferred to the nursing home.

Metabolic/electrolyte disturbances: Of the five deaths, one was discharged home and one transferred to the nursing home.

Sepsis: Of the seven deaths, one was transferred to the nursing home.

Unknown: Of the eleven deaths, one was a swing bed patient, two were transferred to the nursing home, and one discharged home.

Fairfield Memorial Hospital feels that these data do not reflect the quality of care rendered to patients at our hospital. We would appreciate any consideration that you can give us in this matter.

Sincerely,

C. B. Chapman
Administrator

cc: SCHA
FMH Medical Staff

Florence General Hospital
A Community Hospital

D LAMAR LEE, M.D
Medical Director

FRED SCHILLING
President

October 22, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

Gentlemen:

Attached, as requested, is Florence General Hospital's response to the HCFA mortality data. Should you have any questions, please do not hesitate to contact me.

Truly,

Fred Schilling
President

/mm

Attachment

p. o. box 8600 · 512 south irby street · telephone 803-667-3200 · florence, south carolina 29502

Florence General Hospital
A Community Hospital

D. LAMAR LEE, M D
Medical Director

FRED SCHILLING
President

HCFA MORTALITY DATA

Florence General Hospital reviewed all 143 medical charts to verify the mortality data released by HCFA. Twenty percent (20%) allegedly expired out of the hospital, and we are unable to verify the death or the cause.

Of the remaining records, the cause of death was not the primary diagnosis used by HCFA's report, making HCFA in error on forty percent (40%) of the cases. Additionally, fifty-nine percent (59%) of the terminally ill patients themselves, or their families had requested no artificial methods be used to save them. Four percent (4%) had been transferred from hospitals with symptoms that could have been present long before they checked into the hospital. Death is not an unexpected outcome for many very sick patients. The end of suffering and pain is an acceptable clinical outcome.

Florence General Hospital is fully accredited by the Joint Commission on Accreditation of Hospitals. The hospital and doctors review each blood transfusion, monitor every surgery, and have extensive quality controls to assure the finest care possible.

p. o. box 1 8600 · 512 south irby street · telephone 803-667-3200 · florence, south carolina 29502

Georgetown Memorial Hospital

606 Black River Road
P. O. Drawer 1718
Georgetown, South Carolina 29442

Georgetown: (803) 527-1341
Myrtle Beach: (803) 626-9040

October 26, 1987

Provider #42-0020

COMMENTS ON HEALTH CARE FINANCING ADMINISTRATION'S MORALITY DATA

The Administration and Medical Staff of Georgetown Memorial Hospital do not feel that HCFA's Mortality Study is an appropriate method of determining quality of care for medical institutions. The methodology used to determine mortality rates was not developed to monitor hospital quality or mortality, but rather developed to monitor Medicare billing. Financial statistics are not reliable for projecting quality of medical care.

The Government has not described how factors such as patient age, medical history, other illnesses, etc., were defined; how these factors relate to mortality; and how the relative weights of these factors were determined in preparing the statistical model used to compute mortality rates. Therefore, we cannot verify or refute the ranking given by HCFA.

As a community hospital charged with providing high quality health care to our community, we are committed to continued study of the quality of medical care provided at our facility. The Medical Staff, Board of Trustees, Administration and the entire hospital staff are continually involved in quality assurance activities to prevent problems from arising. Our Medical Staff

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and health care professionals aggressively monitor and address patient care issues daily. Every death that occurs in our hospital is reviewed by a physician committee to insure that proper medical care was rendered. Three quality assurance committees meet monthly to address quality issues at Georgetown Memorial Hospital.

The data used by the Health Care Administration (HCFA) indicate that 133 Medicare patients admitted to Georgetown Memorial Hospital in 1986 died within 30 days of admission to the hospital. Of these, 116 died while a patient of the hospital and 17 died after discharge from the hospital. We can verify these HCFA statistics.

Our records indicate that 1,872 Medicare patients were admitted to Georgetown Memorial Hospital (GMH) in 1986. We cannot verify the HCFA number of Medicare beneficiaries treated at our hospital because the HCFA number excludes all admissions except the last admission in any one year. Our hospital, as does every other hospital in the United States, counts every admission to the hospital when compiling records.

For all causes of death in Medicare patients, again according to HCFA, the hospital's overall mortality rate fell within the normal predicted range. The hospital experienced zero mortality rates in three categories--ophthalmologic disease, gynecologic disease and orthopedic disorders, and experienced a one percent mortality rate for urologic disease. Of the 16 individual mortality codes reflected on the HCFA report, Georgetown Memorial Hospital's actual mortality rate as computed

by HCFA fell within the normal predicted mortality range in all but one category, that of cerebrovascular accidents, commonly known as stroke.

In the cerebrovascular accident category, Georgetown Memorial Hospital exceeded the range of predicted mortality rates. However, upon review of these cases, we note that the average patient age of those who died was 76.3 years of age. We also note that in 75 percent of the cases patients' families expected death at the time of hospitalization and requested that their loved ones not be resuscitated should the patients fall into cardiac or respiratory failure.

In conclusion, we found that these patients had severe health problems, multiple complications, were of poor general health, were of advanced age, and were expected by the family to die.

Again, we do not feel that the HCFA Mortality Report is an adequate study of the quality of care rendered in any hospital. The study addresses only the hospital's elderly population. Furthermore, HCFA's mortality study only considers 31 percent of Georgetown Memorial Hospital's entire population.

The study fails to consider difference in services provided by hospitals, the general health of the community served by each hospital, the severity of illness, the existence of multiple medical illnesses, and the presence of terminal illnesses.

GREENVILLE HOSPITAL SYSTEM
701 Grove Road
Greenville, South Carolina 29605

October 19, 1987

William L. Roper, M. D., Administrator
Health Care Financing Administration
Hubert H. Humphrey Building, Room 314-G
200 Independence Avenue, S. W.
Washington, D. C. 20201

Dear Dr. Roper:

On behalf of Greenville Memorial Medical Center Medical Staff, Administration, and the citizens of Greenville County, I welcome the opportunity to comment on the Health Care Financing Administration's 1986 mortality data.

Although the mortality rates for GMMC are comfortably within the parameters predicted by HCFA, I have considerable concern that the methodology used for computing the statistics does not adequately reflect the high quality of care provided within our hospital. I am pleased to note that in the 8/17/87 Federal Register HCFA acknowledged that the data are not, in themselves, measures of hospital performance but "simply one indicator of potential quality destinctions among hospitals." Therefore, under no circumstances should the mortality rates be used as the basis for judging the quality of care provided by different hospitals or for making comparisons among hospitals.

Specific concerns regarding the methodology are as follows:

1. Statistics were developed directly from billing information rather than from individual patient medical records. HCFA is aware of the limitations and notes, "...our model for predicting a particular hospital's expected mortality rate is limited by the kinds of information available to us on Medicare bills and general information on the hospitals involved."

2. The most important factor in developing meaningful mortality data, severity of illness, was not considered. Once again, HCFA's awareness of this factor is evidenced in the statement, "Not all of the factors affecting the probability of death in a particular case, most notably severity of illness, are included..." As a large referral center for a three state area, GMMC receives and treats patients with the most severe of illnesses. Our facility is designated as a level 3 trauma center and as such receives all the major trauma cases in the region. Additionally, GMMC has comprehensive inpatient and outpatient programs for the treatment of cancer, thus drawing those with the diagnosis of cancer to GMMC for treatment.

3. The way in which the information was collected and is reported imply reasons or causes of death. Actually, the categories listed are classifications of the reason for admission.

4. Contributing factors to death occurring after discharge were not considered. Death may have been the result of an accident or a condition totally unrelated to the reason for hospitalization. Also, care rendered after discharge is important. Non-compliance with prescribed medical regimen in a nursing home or in the patient's home would of course adversely affect the well-being of the patient. Retrievability of such information by hospitals is difficult, if not impossible. Additionally, hospitals are unable to verify all deaths reported to have occurred after discharge did in fact occur.

It is of utmost importance that the lay public understand that the predicted mortality range developed for each hospital was mathematically computed based on age, sex, prior hospitalizations, transfer status, and complicating medical conditions of the actual patients treated at the hospital. As a result, predicted ranges will differ among hospitals, and should not be misconstrued as reflecting the probability of death if treated at a given hospital.

The effort to focus on quality of care provided to the nation's Medicare beneficiaries is laudable. As HCFA perfects its techniques of data collection, computation and reporting, the users of health care services will be assisted in evaluating the quality of care provided by individual institutions and practitioners. However, until such perfection is realized, data such as mortality rates serve only to raise question and very possibly create confusion in the minds of our nation's citizens.

Sincerely,

Frank D. Pinckney
Vice President, Administrator
Greenville Memorial Medical Center
#420078

FDP:mjf

HCA Aiken Regional Medical Centers

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
220 Independence Avenue, SW
Washington, D.C. 20201

Re: 1986 Mortality Statistics

Dear Dr. Roper:

The data used by HCFA indicate that a total of 1,653 Medicare patients admitted to HCA Aiken Regional Medical Centers died within 30 days of admission. Of these, 173 died while still a patient of the hospital, while 21 died after discharge. Our own records indicate that 2,760 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at HCA Aiken is correct.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

In all of the diagnostic categories, the hospital's actual mortality rate falls within the range of the predicted mortality rate.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

J. G. Smith
Administrator

JGS:ACW:swn

202 University Parkway, P.O. Drawer 1117
Aiken, South Carolina 29802-1117
Telephone (803) 642-0800

GREENVILLE HOSPITAL SYSTEM
701 Grove Road
Greenville, South Carolina 29605

October 19, 1987

William L. Roper, M. D., Administrator
Health Care Financing Administration
Hubert H. Humphrey Building, Room 314-G
200 Independence Avenue, S. W.
Washington, D. C. 20201

Dear Dr. Roper:

On behalf of Hillcrest Hospital Medical Staff, Administration, and the citizens of Simpsonville, Fountain Inn and surrounding communities, I welcome the opportunity to comment on the Health Care Financing Administration's 1986 mortality data.

Although the mortality rates for Hillcrest are within the parameters predicted by HCFA, I have considerable concern that the methodology used for computing the statistics does not adequately reflect the high quality of care provided within our hospital. I am pleased to note that in the 8/17/87 Federal Register HCFA acknowledged that the data are not, in themselves, measures of hospital performance but "simply one indicator of potential quality distinctions among hospitals." Therefore, under no circumstances should the mortality rates be used as the basis for judging the quality of care provided by different hospitals or for making comparisons among hospitals.

Specific concerns regarding the methodology are as follows:

1. Statistics were developed directly from billing information rather than from individual patient medical records. HCFA is aware of the limitations and notes, "...our model for predicting a particular hospital's expected mortality rate is limited by the kinds of information available to us on Medicare bills and general information on the hospitals involved."

2. The most important factor in developing meaningful mortality data, severity of illness, was not considered. Once again, HCFA's awareness of this factor is evidenced in the statement, "Not all of the factors affecting the probability of death in a particular case, most notably severity of illness, are included..."

3. Statistics are especially unreliable for small hospitals because, as HCFA admits, "The smaller the number of admissions, the less reliable are the statistics,..." Such is the case with Hillcrest. Because of the small

number of patients treated at Hillcrest, one or two deaths (additional or less) significantly affects the overall mortality rate and even more so the individual diagnostic category rates.

4. Discovery of errors in information reported by HCFA causes question regarding the overall reliability of the information. Data furnished by HCFA indicate that a total of 353 Medicare patients were admitted to Hillcrest Hospital during 1986; 59 patients died within 30 days of admission. Of these, 49 died while still a patient of the hospital and 10 died after discharge. Our own records indicate that 421 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. Our own records also indicate 4 of the 10 patients reported as dying after discharge are classified incorrectly. Three expired while hospitalized, but most notably is the fact that the remaining individual was never a patient at Hillcrest but instead was treated and discharged from another hospital. Correction of the information results in a reduction in the "all causes" mortality rate to 16%.

5. Contributing factors to death occurring after discharge were not considered. Death may have been the result of an accident or a condition totally unrelated to the reason for hospitalization. Also, care rendered after discharge is important. Non-compliance with prescribed medical regimen in a nursing home or in the patient's home would of course adversely affect the well-being of the patient. Retrievability of such information by hospitals is difficult, if not impossible. Additionally, hospitals are unable to verify all deaths reported to have occurred after discharge did in fact occur.

It is of utmost importance that the lay public understand that the predicted mortality range developed for each hospital was mathematically computed based on age, sex, prior hospitalizations, transfer status, and complicating medical conditions of the actual patients treated at the hospital. As a result, predicted ranges will differ among hospitals, and should not be misconstrued as reflecting the probability of death if treated at a given hospital. The predicted range for Hillcrest is slightly higher than that of neighboring hospitals. This is due to several factors. The average age of Hillcrest Hospital patients included in the HCFA listing is 81. According to the most recent information provided by the National Center For Health Statistics, the average life expectancy for females in South Carolina is 76 and for males is 68. Hillcrest services an older Medicare population who has multiple complicating medical conditions. Additionally, because of the lack of nursing home beds in the area surrounding Hillcrest Hospital, the elderly are often cared for in the home and then admitted to the hospital in the final stages of illness when the family can no longer provide necessary care.

The effort to focus on quality of care provided to the nation's Medicare beneficiaries is laudable. As HCFA perfects its techniques of data collection,

computation and reporting, the users of health care services will be assisted in evaluating the quality of care provided by individual institutions and practitioners. However, until such perfection is realized, data such as mortality rates serve only to raise question and very possibly create confusion in the minds of our nation's citizens.

Sincerely,

Jack A. Macauley

Jack A. Macauley, Administrator
Hillcrest Hospital
#420037

JAM:mjf

Attachment

ATTACHMENT

Hillcrest Hospital
#420037

The following patients were listed incorrectly on the 1986 mortality data received earlier this month:

Patient ID Number	Surname	Listed Date of Death	Corrected Date of Death
[redacted]	[redacted]	12/31/86	12/23/86
[redacted]	[redacted]	12/31/86	12/29/86
[redacted]	[redacted]	1/31/86	1/30/86

Additionally, one patient listed was not treated at Hillcrest Hospital but instead was a patient elsewhere:

[redacted]	[redacted]	5/30/86	

Laurens County Health Care System

October 20,1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospitla Mortality Information
P.O. Box 26684
Balitmore, Maryland 21207

Dears Sirs,

In reguards to the mortality review data the following errors have been identified:

Laurens District Hospital (42-0003)

[redacted] Admit 10/1 D/C 10/10 Death 10/10
* Incorrect admit and discharge dates on the data sheet
* Patient was inhouse at the time of death

[redacted] Admit 12/9 D/C 12/21 Death 12/21
* Incorrect admit and discharge dates on the data sheet
* Incorrect date of death on the data sheet

[redacted] Admit 12/15 D/C 12/26 Death 12/26
* Incorrect date of death on the data sheet

[redacted] Admit 8/10 D/C 8/10 Death 8/10
* Incorrect date of discharge on the data sheet
* Incorrect date of death

[redacted] Admit 8/24 D/C 8/24 Death 8/24
* Incorrect date of death on the data sheet

[redacted] Admit 9/21 D/C 9/21 Death 9/21
* Incorrect date of death on the data sheet

[redacted] Admit 12/18 D/C 12/24 Death 12/24
* Incorrect dates of admission and discharge on the data sheet
* Incorrect date of death on the data sheet

[redacted]
* Patient was transferred to another acute care facility. This should not be included in this data.

This represents a 12.3% error rate of the data submitted for Laurens District Hospital.

The following represents data on the 8 post hospitalization deaths:
3 were transferred to nursing home facilities
1 was a cardiac arrest unrelated to the hospital diagnosis
1 was metastatic terminal cancer
2 were cerebrovascular accidents
3 were 'no code' patients

Laurens District Hospital
420 Farley Avenue
Laurens, South Carolina 29360
Telephone 803/984-4511

Bailey Memorial Hospital
Jacobs Highway
Clinton, South Carolina 29325
Telephone 803/833-2550

These post hospitalization deaths show no reflection of the high quality of care that these patients received at Laurens District Hospital.

Bailey Memorial Hospital (42-0038) Mortality Review Data Errors:

[redacted]

* This patient was transferred to another acute care facility. This should not be included in this data.

[redacted] Admit 2/4 D/C 2/17 Death 2/17

* Incorrect date of death on the data sheet

[redacted] Admit 1/22 D/C 1/30 Death 2/7

* Incorrect date of discharge on the data sheet

[redacted] Admit 3/12 D/C 4/6 Death 4/6

* Incorrect date of death on the data sheet

This represents a 9.3% error rate of the data submitted for Bailey Memorial Hospital.

Of the 6 deaths that were reported post hospitalization, 3 occurred in a nursing home facility.These post hospitalization deaths do not reflect the high quality of care that these patients received at Bailey Memorial Hospital.

Bailey Memorial Hospital did not fall outside the predicted range of mortality rates.

Laurens Distrcit Hospital did exceed the range of predicted mortality rate in one category,that being the division of CA.In any event there were less than 30 cases in this particular category, which further indicates that these patients were admitted to the hospital shortly before death. Of the 14 CA cases that died as inhouse patients, 100% were admitted in the final stage of illness. This is documented on the charts by the wishes of the immediate family to provide only comfort measures during the hospitalization.

The methodology used by HCFA to establish a range of predicted mortality rate was not explained. Therefore this measuring tool is highly suspect and may not apply to these two hospitals or to our region of the country. It is our opinion the data submitted does not provide an accurate measurement of the high quality of care provided by Laurens District or Bailey Memorial Hospitals.

Laurens District Hospital
420 Farley Avenue
Laurens, South Carolina 29360
Telephone 803/984-4511

Bailey Memorial Hospital
Jacobs Highway
Clinton, South Carolina 29325
Telephone 803/833-2550

Sincerely,

John L. Ramsey, Jr.
Chief Financial Officer

JLR/kgl

cc SCHA

Laurens District Hospital
420 Farley Avenue
Laurens, South Carolina 29360
Telephone 803/984-4511

Bailey Memorial Hospital
Jacobs Highway
Clinton, South Carolina 29325
Telephone 803/833-2550

Lee County Memorial Hospital
800 W. CHURCH ST. P.O. BOX 528 BISHOPVILLE, S.C. 29010 (803) 484-5313

October 27, 1987

THOMAS H. ALEXANDER
CHAIRMAN, BOARD OF COMMISSIONERS

A. TERRY DIXON
DIRECTOR

Mr. Harvey Brooks
Healthcare Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Md. 21207

RE: Mortality Data Release, Provider # 42-0028

Dear Mr. Brooks:

Thank you for providing hospitals with the opportunity to comment on the mortality data that is going to be released in December by HCFA. While mortality data has been inappropriately used by various entities as a measure of the quality of the hospitals' services, or as a method for making other judgments about a hospital's operation, we are compelled to register our discomfort with the release of this data for that very reason. Even though the statistical program which provided the mortality rates for our hospital placed this institution within the "range of predicted mortality rates" in all but one disease category, it is still our concern that this information may be used as an indication of quality. Quality is not reflected by this data but is assured through various programs which assure an appropriate quality of care.

The statistical model used in developing the predicted mortality rates is inadequate. Our industry has not been given complete information on the model used to develop this data. From all appearances, it does not take into account many of the factors which affect mortality. The model cannot be validated. It is quite likely that a patient could be better off in a hospital with a higher mortality rate, simply because that hospital treats sicker patients of that type and therefore has more experience with treating that particular type of disease.

There are numerous errors in the data--an error rate in excess of 20% has been reported. In our case, the date of death was inaccurate in two instances:

Patient No.	Actual Date of Death
[redacted]	10/14/86
[redacted]	12/30/86

Finally, the volume of patients included in our hospital's mortality data for any of the given diagnostic categories is so small that it is statistically unreliable, particularly in the one disease category where our mortality rates exceeded the range of predicted mortality rates. There were only five Medicare patients falling under this particular disease category. Certainly, no conclusions can be based on a sample of five cases.

We trust these comments will accompany the release of mortality data this December. I would encourage you to put a strong disclaimer with that data regarding the reliability of this as an indication of quality or competency of any institution, its medical staff or its employees.

Sincerely,

A. Terry Dixon

A. Terry Dixon
Hospital Director

LEXINGTON MEDICAL CENTER

2720 Sunset Boulevard
West Columbia, SC 29169
803-791-2109

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President
George I. Rentz
Executive Vice President
Shirley P. Padgett
Chief of Staff
G. Tripp Jones, M.D.

October 28, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

Lexington Medical Center supports valid efforts to measure, monitor and improve the quality of care provided in all health care settings. This dedication is demonstrated by our commitment to monitoring care through our accreditation by the Joint Commission, our quality assurance programs, regular credentialing and review of our medical staff and other ongoing programs.

While we commend efforts to ensure the delivery of quality care, we are concerned that the data to be released by the Health Care Financing Administration may be incorrectly interpreted as an accurate measure of mortality or as an indicator of the quality of care patients receive in hospitals. Because mortality data is easily misinterpreted, it can cause confusion and apprehension among Medicare beneficiaries and the public in general.

We are also concerned about the ability of the methodology used to detect differences in quality as well as the lack of a severity index and other significant factors. In addition, since hospitals have not had the opportunity to review the methodology, we are unsure of other shortcomings that may exist.

Of the complications that HCFA had determined should be matched against "similar" cases to determine range of predicted mortality rates, diagnoses such as acute myocardial infarction, pulmonary embolism and pneumonia were not considered "significant comorbid conditions". As these can, and often do, affect a patient's health status and recovery expectations, these diagnoses should impact the grouping of patients with similar medical conditions to predict mortality.

In analyzing the data provided for Lexington Medical Center, the following discrepancies were found:

- Incorrect dates of death were provided on 10 patients. Attachment I.

- Two patients were transferred to other hospitals and, therefore, should not be included in the records for Lexington Medical Center. Attachment II.

- There were 11 errors in the principal diagnosis. Attachment III.

- We have been unable to verify that one patient listed has ever been admitted to our facility. Attachment IV.

However, it is our position that mortality data is not a valid measure of quality. Therefore, the HCFA data is not a real reflection of hospital performance and, thus, the key issue isn't one of flawed data but of drawing inappropriate conclusions from the data about quality of care.

The American Hospital Association and other organizations, including the Joint Commission, are investigating methods of evaluating hospital quality that rely on measures other than mortality rates. We support such efforts and look forward to their results.

Sincerely,

LEXINGTON MEDICAL CENTER

George I. Rentz

GIR:vc

Attachments

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Sincerely,

LEXINGTON MEDICAL CENTER

George I. Rentz

GIR:vc

Attachments

ATTACHMENT I

	PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LTRS)	DATE OF DISCHARGE	DATE OF DEATH
1.	[redacted]	[redacted]	04/02/86	
2.	[redacted]	[redacted]	06/19/86	06/19/86
3.	[redacted]	[redacted]	05/23/86	05/23/86
4.	[redacted]	[redacted]	12/30/86	12/30/86
5.	[redacted]	[redacted]	02/16/86	02/16/86
6.	[redacted]	[redacted]	12/25/86	12/25/86
7.	[redacted]	[redacted]	04/05/86	04/05/86
8.	[redacted]	[redacted]	04/06/86	04/06/86
9.	[redacted]	[redacted]	03/27/86	03/27/86
10.	[redacted]	[redacted]	01/15/86	01/15/86

ATTACHENT 2

44 patients died after discharge

Two transferred from Lexington County Hospital to another hospital:

	PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LTRS)	DATE OF DISCHARGE	DATE OF DEATH
1.	[redacted]	[redacted]	03/11/86	? 03/17/86
2.	[redacted]	[redacted]	07/11/86	? 07/15/86

ATTACHMENT 3

Eleven errors in principal diagnosis:

	PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LETTERS)	DATE OF DISCHARGE	DATE OF DEATH	INCORRECT	CORRECT
1.	[redacted]	[redacted]	06/23/86	06/23/86	198.5 (Secon. CA of bone)	162.5 (Prim. CA of lung)
2.	[redacted]	[redacted]	01/19/86	01/19/86	198.5 (Secon. CA of bone)	185 (CA of prostate)
3.	[redacted]	[redacted]	08/29/86	08/29/86	531.50 (Perf. gast. ulcer)	574.10 (Choleystitis w/stone)
4.	[redacted]	[redacted]	01/12/86	01/12/86	414.0 (ASHD)	428.0 (CHF)
5.	[redacted]	[redacted]	10/29/86	10/29/86	417.0 (AV fistula)	410.7 (M.I.)
6.	[redacted]	[redacted]	01/13/86	01/13/86	411.1 (Unstable Angina)	428.0 (CHF)
7.	[redacted]	[redacted]	09/08/86	09/08/86	496 (COPD)	162.9 (CA of lung)
8.	[redacted]	[redacted]	09/01/86	09/01/86	786.09 (Shortness of Breath)	482.1 (pseudomonas)
9.	[redacted]	[redacted]	01/08/86	01/08/86	428.0 (CHF)	482.4 (Staphylococcus)
10.	[redacted]	[redacted]	01/03/86	01/03/86	428.0 (CHF)	516.8 (Interstitial Pneumoni
11.	[redacted]	[redacted]	12/19/86	01/12/87	513.0 (Abscess lung)	117.5 (Cryptococcosis)

ATTACHMENT 4

One patient listed that we can not identify as ever being admitted into our facility:

	PATIENT ID NUMBER (HIC)	SURNAME (FIRST 6 LTRS)	DIGNOS. CATAG.	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH
1.	[redacted]	[redacted]	GI	81	F	12/02/86	12/12/86	12/12/86

SC 49.6

Live Oaks Hospital

Another Basic American Medical Company

HCFA
Health Standards&Quality Bureau
Hospital Motality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper,

I have received the mortality information which will be released by HCFA very shortly. Live Oaks Hospital provides the finest care anywhere and I feel that the release of such information will distort the feelings of the public. The statistical model that is used by HCFA leaves alot to be desired in terms of accuracy. The results of our information which you intend to release is greatly distorted in that Memorial Medical Center (Savannah, GA.) and Live Oaks both received credit for someone dying in their respective facility when in fact the death occurred in Savannah. This is not accurate reporting and changes should be made to insure accurate results. I will list below the errors that were made:

Patient Name	Patient ID#	Date Of Death
[redacted]	[redacted]	12/30/86
		09/30/86
		02/28/86
		05/28/86
		10/27/86
		02/27/86
		10/05/86

I would strongly suggest that in the future you devise a more accurate system of obtaining information be used when releasing information of this caliber to general public. I can assure you that Live Oaks Hospital has prepared itself for the public and I feel sure that hospital's all over the nation have done the same.

Sincerely,

Mike Farley

Mike Farley
Administrator

HIGHWAY 278 WEST
RIDGELAND, SOUTH CAROLINA 29936
PHONE 803-726-8111

cc: hospital file
medical staff

Live Oaks Hospital

Another
Basic
American
Medical
Company

BASED ON THE INFORMATION RELEASED BY HCFA THE FOLLOWING MORTALITY FIGURES HAVE BEEN COMPILED.

NUMBER OF MALE PATIENTS WHO HAVE DIED: 20
NUMBER OF FEMALE PATIENTS WHO HAVE DIED: 21

NUMBER OF DEATHS FROM THE FOLLOWING CATEGORIES:

CANCER	6
STROKE	8
GI CATASTROPHE	2
SEVERE CHRONIC HEART DISEASE	7
SEVERE ACUTE HEART DISEASE	3
METABOLIC AND ELECTROLYTE DISORDER	2
ORTHOPEDIC TRAUMA	1
PULMONARY DISEASE	9
ANEMIA	1
ANOXIC BRAIN DAMAGE	1
ABDOMINAL CONDITIONS	1

MORTALITY PATIENTS CLASSIFIED BY AGE

UNDER 60	0
60-65	2
65-70	6
70-75	5
75-80	8
80-85	7
85-90	7
90-95	4
95-100	1
100-?	1

* IT SHOULD BE NOTED THAT SWING BED PATIENTS ARE INCLUDED IN THIS INFORMATION RELEASED BY HCFA.
* IT SHOULD FURTHER BE NOTED THAT NOT ALL DEATHS OCCURRED AT LIVE OAKS. SOME DEATHS OCCURRED AFTER BEING TRANSFERRED TO SAVANNAH.

STUDY COMPILED BY MIKE FARLEY.

HIGHWAY 278 WEST
RIDGELAND, SOUTH CAROLINA 29936
PHONE 803-726-8111

Loris Community Hospital
LORIS, SOUTH CAROLINA 29569

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Hubert H. Humphrey Building, Room 314-G
200 Independence Avenue, S.W.
Washington, DC 20201

Dear Dr. Roper:

We do appreciate the opportunity to comment on the HCFA Mortality Data Release for Loris Community Hospital in Loris, South Carolina. The mortality data was reviewed with all deaths confirmed by the inpatient medical record, physician's offices or other agencies.

All deaths listed, which occurred in the hospital, were reviewed along with dates of expiration. No discrepancies were found.

The deaths listed as occurring within thirty days post discharge were also reviewed. Two patients, which according to the data expired outside of the hospital, actually expired in the hospital. Patient [redacted] admitted June 2, 1986, expired June 5, 1986 in the hospital rather than June 6, 1986 post discharge. Patient [redacted] admitted January 21, 1986, expired in the hospital on January 25, 1986 instead of on January 31, 1986 post discharge.

Other discrepancies of post discharge deaths include patient [redacted] who expired post discharge on July 24, 1986 with a Myocardial Infarction rather than on July 31, 1986 with Congestive Heart Failure as was the principle discharge diagnosis. Patient [redacted] expired on December 11, 1986 with the cause of death being a Myocardial Infarction rather than the Profound Anemia as was the reason for the recent hospital admission. Patient [redacted] expired on July 28, 1986 with the cause of death being a Myocardial Infarction which differs from the Brain Lesion as was the principle discharge diagnosis.

The other deaths which occurred post discharge were confirmed without discrepancies.

We are pleased that HCFA is looking at and concerned about the quality of care. Obviously we too are concerned about the care given to our patients but wonder if this methodology HCFA developed can appropriately be used to analyze and monitor quality and mortality factors. Loris Community Hospital has been accredited by the Joint Commission on Accreditation of Hospitals for many years. We have an ongoing Quality Assurance program which encompasses retrospective and concurrent reviews of all services provided by the hospital and Extended Care Facility. Our program allows a method for the identification and resolution of problems thereby allowing us to monitor the care and take necessary action to insure that care of a high quality is achieved. We know that this method works well for us to help insure that a high quality of patient care is provided to our patients.

Sincerely,

LORIS COMMUNITY HOSPITAL

Alton P. Ewing, Jr.
Assistant Administrator

ib

LOWER FLORENCE COUNTY HOSPITAL

P. O. Box 1035 Lake City, South Carolina 29560 Phone (803) 394-2036

October 20, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper,

Prior to comments relating to specific cases identified in the 1986 Mortality Report, I would like to state the following regarding the applicability of this data to the quality of care issue.

On page 3, paragraph 1, of your letter dated September 21, 1987 to all hospital administrators, you state "... we can not and do not recommend the use of the information by itself to make judgements about the quality of care in an individual hospital or to make comparisons among hospitals." While this disclaimer is intended to recognize the lack of validity in judging quality of care because of the study design and imperfect input data, you must realize that the general public will draw this very conclusion. If your intention is to help consumers make reliable choices in the selection of hospital and physician providers, a study design to include, as you suggested, "... additional statistical measures to deal with complex issues such as severity of illness ...", should be developed prior to release of this information. Leading the public to interpret the level of quality at a particular facility as better or worse than another by use of billing data, instead of a comprehensive evaluation of the true level of patient care, is not what would be expected. All research models must be both reliable and valid, two qualities the HCFA study lacks.

In summary, I would like to state that the Board, management, medical and hospital staff at Lower Florence County Hospital are committed to ensure that all who are treated receive the highest level of medical care. This committment is demonstrated by the involvement of all in our active quality assurance committee. Not only do we review all deaths but also any problems or concerns related to patient care and health care effectiveness. We applaud HCFA for its intention, but question its methodology.

The data submitted by HCFA indicates that a total of 353 Medicare patients were admitted to Lower Florence County Hospital.(The total Medicare admissions were 710, indicating a high multiple admission rate for Medicare patients in our service area.) HCFA only counted the patient's last admission during 1986. Of the 353 admissions, 49 deaths occurred either in the hospital or within 30 days of the admission.

Forty-two (42) patients died while an inpatient and seven (7) died after discharge, according to the HCFA data. Of the non-hospitalized deaths, one patient was transferred to another hospital and died; two patients died in a nursing home; and, four patients died at home. It is uncertain as to the cause of death or whether the death was related to the most recent hospitalization.

Of the deaths that occurred in the hospital, thirteen (13) were the result of terminal illness with death the expected outcome. It is common for patients and their families to look to the local hospital to care for their needs during these final days. Lower Florence County Hospiatal recognizes and accepts this responsibility regardless of the determination by Medicare as to the necessity of admission. Any means that we have to comfort and support the elderly and their family will be given.

The following are data errors:

1. [redacted] - Date of death [redacted] - This individual's date of death was reported by HCFA to be 7-4-86 and date of discharge 7-5-86.

2. [redacted] - Date of death [redacted] - This individual's date of death was reported by HCFA to be 3-31-86.

3. [redacted] - Date of death [redacted] - This individual's date of death was reported by HCFA to be 10-31-86.

Sincerely,

Richard L. Gamber
Administrator

CC: Senator Strom Thurmond
Senator Ernest F. Hollings
Congressman Robin Tallon

Marion Memorial Hospital

BOBBY T. PHILLIPS
Administrator

P.O. Drawer 1150
1108 N. Main Street
Marion, South Carolina 29571
803-423-3210

October 26, 1987

William L. Roper, M. D., Administrator
Department of Health and Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

Marion Memorial Hospital is pleased to have the opportunity to comment on the Health Care Financing Administration's Hospital Mortality Data recently received by this hospital. Also, we appreciate that HCFA is considering the issue of Quality and not just the economics of medical care. We historically have been concerned and are concerned about the quality of care we render; and while our hospital specific data could be perceived as indicative of "average care" to our patients, this could not be further from the truth. Marion Memorial Hospital has been, is, and will continue to be committed to providing high quality health care to our patients. This commitment is shown through an on-going Quality Assurance Program and peer and utilization review activities. Our hospital has been continuously accredited by the Joint Commission on Accreditation of Healthcare Organizations since 1964.

In preparation for replying to your request, we have re-reviewed all of the Medicare mortality statistics from Marion Memorial Hospital for calendar year 1986. It is our hospital's general policy to review all mortality outcomes and this review represents a second look at the deaths from 1986. The second review was accomplished by the Medical Staff and in no instance was the attending physician permitted to review his own mortality figures.

After careful consideration of factors involved in diagnosis and treatment of the individuals of the deaths reviewed, medical staff could find no instance where inappropriate therapy or lack of professional care contributed to any fatal outcomes, but in every instance these were considered a complication of the patient's underlying disease process.

Hospital Administration and Medical Staff view the data which have been accumulated to use in this approach to quality review as being unreliable for the following reasons:

A. The accumulated data were originally collected for billing purposes and as such do not reflect quality care issues.

B. The accumulated data have a number of instances that are in error. (i.e., One patient listed as dead is still very much alive.)

C. About 20% of patients listed in data which did indeed expire, did not expire in Marion Memorial Hospital.

D. The methodology of obtaining mortality ranges are obscure and has no apparent basis in statistical validity.

The Administration and Medical Staff of Marion Memorial Hospital view the collection and publication or dissemination of such unreliable mortality data as being of no value in determining quality care and perhaps at worse is disseminating unreliable and potentially damaging information. If mortality data are to be involved in evaluating standards of care, a number of modifying factors must be considered which are not obvious from the data.

Sincerely,

H. V. Coleman, M. D., Chairman
Peer Review Committee

Bobby T. Phillips, Administrator
Marion Memorial Hospital

HVC/ht

Marion Memorial Hospital

BOBBY T. PHILLIPS
Administrator

P.O. Drawer 1150
1108 N. Main Street
Marion, South Carolina 29571
803-423-3210

October 26, 1987

William L. Roper, M. D., Administrator
Department of Health and Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

Marion Memorial Hospital is pleased to have the opportunity to comment on the Health Care Financing Administration's Hospital Mortality Data recently received by this hospital. Also, we appreciate that HCFA is considering the issue of Quality and not just the economics of medical care. We historically have been concerned and are concerned about the quality of care we render; and while our hospital specific data could be perceived as indicative of "average care" to our patients, this could not be further from the truth. Marion Memorial Hospital has been, is, and will continue to be committed to providing high quality health care to our patients. This commitment is shown through an on-going Quality Assurance Program and peer and utilization review activities. Our hospital has been continuously accredited by the Joint Commission on Accreditation of Healthcare Organizations since 1964.

In preparation for replying to your request, we have re-reviewed all of the Medicare mortality statistics from Marion Memorial Hospital for calendar year 1986. It is our hospital's general policy to review all mortality outcomes and this review represents a second look at the deaths from 1986. The second review was accomplished by the Medical Staff and in no instance was the attending physician permitted to review his own mortality figures.

After careful consideration of factors involved in diagnosis and treatment of the individuals of the deaths reviewed, medical staff could find no instance where inappropriate therapy or lack of professional care contributed to any fatal outcomes, but in every instance these were considered a complication of the patient's underlying disease process.

Hospital Administration and Medical Staff view the data which have been accumulated to use in this approach to quality review as being unreliable for the following reasons:

A. The accumulated data were originally collected for billing purposes and as such do not reflect quality care issues.

B. The accumulated data have a number of instances that are in error. (i.e., One patient listed as dead is still very much alive.)

C. About 20% of patients listed in data which did indeed expire, did not expire in Marion Memorial Hospital.

D. The methodology of obtaining mortality ranges are obscure and has no apparent basis in statistical validity.

The Administration and Medical Staff of Marion Memorial Hospital view the collection and publication or dissemination of such unreliable mortality data as being of no value in determining quality care and perhaps at worse is disseminating unreliable and potentially damaging information. If mortality data are to be involved in evaluating standards of care, a number of modifying factors must be considered which are not obvious from the data.

Sincerely,

H. V. Coleman, M. D., Chairman
Peer Review Committee

Bobby T. Phillips, Administrator
Marion Memorial Hospital

HVC/ht

McLeod
REGIONAL MEDICAL CENTER
The Choice For Medical Excellence.
555 East Cheves Street · PO Box F-8700 · Florence, SC 29501

October 20, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Hubert H. Humphrey Building, Room 314-G
200 Independence Avenue, S. W.
Washington, D. C. 20201

Dear Dr. Roper:

The following are the comments of the HCFA mortality data as submitted to the McLeod Regional Medical Center of the Pee Dee, Florence, South Carolina 29501.

The McLeod Regional Medical Center has reviewed in detail the HCFA mortality data. On review of the 267 deaths reported at the McLeod Regional Medical Center during 1986, we found the data to be correct except for a few small deficiences. Five patients thought to die outside the hospital actually died while still in the hospital and 4 patients who were found to have succumbed after discharge had a wrong day of death. We have also found, through discussions with other hospitals in follow up of these patients, that 2 other patients should be added to our mortality rate under cancer which were inappropriately listed for other hospitals from whom the patient was transferred to our institution.

The one, lone, significant coding error dramatically affected our mortality rate in the category sepsis(SE). We were listed with 6 deaths out of 8 patients, but actually, one patient did not die during the admission for sepsis but was readmitted a month later with terminal cancer. This incorrect coding then put us above the range for the mortality rate for this diagnosis. We could not determine the exact percentage of patients dying after discharge who might, in fact, be alive, as information concerning death after discharge is not included in the patient's hospital medical record.

Interpretive remarks: McLeod Regional Medical Center is a referral hospital accepting seriously ill patients with complicated illnesses from around the area. The data released by HCFA is only for Medicare patients, for the most part an elderly popluation with numerous problems. Since McLeod is a Regional Medical Center, the severity of illness in the patients at our institution is much higher than that of ordinary community hospitals. We have referral cardiac services including surgery and catheterization, referral pulmonary services including patients with severe lung diseases requiring respirator care, a cancer center for patients with frequently terminal diseases and, finally, a high number of patients with chronic renal disease on dialysis. The HCFA data does not correlate nor consider the course of illness affected by other factors that have nothing to do with the hospital such as: (1) Preventive health measures. (2) Availability of care prior to hospitalization. (3) Compliance with medications at home. (4) Timeliness of diagnosis by the referring hospital and physician. (5) Quality of outpatient care. (6) Timeliness in transfer from other hospitals. (7) Social factors totally beyond our control. (8) General health of the patient prior to hospitalization. (9) Stage of the illness when the patient is hospitalized. (10) Psychological course of the patient.

(CONTINUED)

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In addition, the Pee Dee area of South Carolina has a shortage of nursing home beds and many patients are admitted to a hospital to die there and this also affects this mortality data. The factors used by HCFA as the most important relating to mortalities are really unknown and the reliability of the HCFA model has never been validated. HCFA data, are not, by themselves, measures of hospital performance.

Specific Comments -

We reviewed the 19 high-risk gastrointestinal catastrophies. The subset of patients at our institution were within specific ICD-9-CM codes that have an extraordinarily high risk of death expressed as either patients who were expected to diè when they were admitted or where there was a significant probability/possibility of dying during that hospitalization. One-third of these patient had terminal cancer, 3 had terminal liver failure, and 3 had bowel gangrene with chronic renal failure; another patient was admitted only for terminal care. All other patients had multiple other risk factors including 3 who had myocardial infarctions during the hospitalization. Finally, one-third of all these patients were transferred to this facility because of the critical nature of their illness.

The other category, sepsis, where the hospital was out of range for HCFA data contained so few patients(only 8)to be statistically meaningless. If the 1 patient wrongly included(See above)was removed from the list, the percentage then approximates the "acceptable" upper mortality rate anyway. Interestingly, 2 of these patients had terminal cancer in which the infection was the final event prior to death and the other 3 patients with sepsis(fulminant pneumonia, meningitis, and rectal abscess)were all transferred to this institution for serious illness.

Sincerely,

F. Richard Ervin, MD

Richard F. Ervin, M. D.
Vice-President of Medical Services

rp/mt
DT: 10/20/87
DD: 10/19/87
Tape B

McLeod
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Errors that were identified from the HCFA mortality data for McLeod Regional Medical Center.

The following patient died in the hospital on a later hospitalization with a different diagnosis:

				correct adm	correct dis.	correct diagnosis
[redacted]	SE	061	F	9-30-86	10-09-86	terminal Cancer

The following patients died in the hospital during the last hospitalization:

				Admission	Discharge	Death
[redacted]	GC	061	M	12-26-86	01-01-77	01-01-87
[redacted]	GC	075	M	10-16-86	10-23-86	10-23-86
[redacted]	UN	084	F	06-15-86	06-16-86	06-16-86
[redacted]	UN	083	F	03-12-86	03-28-86	03-28-86
[redacted]	CE	082	F	02-20-86	03-02-86	03-02-86

The following patients had the wrong date of death:

[redacted]	UN	078	F	11-07-86	11-14-86	11-27-86
[redacted]	UN	050	M	07-15-86	07-18-86	07-21-86
[redacted]	CA	068	F	02-09-86	02-14-86	02-22-86

The above errors were the only ones corrected by the date necessary to mail this report back to HCFA

555 East Cheves Street · PO Box F-8700 · Florence, SC 29501 · (803) 667-2000

Newberry County Memorial Hospital
2669 KINARD STREET
NEWBERRY, SOUTH CAROLINA 29108

October 27, 1987

Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
200 Independence Avenue, SW
Washington, D.C. 20201

Upon review of the hospital mortality statistics for Newberrry County Memorial Hospital, the following inconsistancies were noted:

1) There were errors found in the calculation of the "Actual Mortality Rate" for two categories. Category "CA" calculates to 22% (based on "Cases" and deaths listed in the printout submitted to us), and category "HS" calculates to 34%. These percentages were listed as 33% for "CA" and 38% for "HS".

2) Nine patients expired from causes not related to the admitting diagnosis. Recalculation, using a final diagnosis based on actual cause of death, does not place our actual mortality rate outside the predicted range for any category.

3) Five patients were transferred to other hospitals. Four of these were transferred to the VA Hospital in Columbia, and one was transferred to Providence Hospital in Columbia, SC. This patient was verified with Providence Hospital. The patient was admitted there where he did expire within 30 days. This patient is not listed on their printout of Medicare deaths from HCFA.

4) One patient expired within 30 days from discharge from our hospital in a house fire. His death was totally unrelated to his hospital stay.

5) Five patients that were reported as expiring within 30 days after discharge actually expired while in-house. One patient reported as expiring in house actually expired in a nursing home after discharge.

Please refer to attached listing for specific on the above noted findings.

Sincerely,

Donnie J. Weeks
Administrator
Newberry County Memorial Hospital

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

NEWBERRY COUNTY MEMORIAL HOSPITAL
ATTACHMENT I

PATIENT ID NUMBER (HIC)	SURNAME	DISCREPANCY
[redacted]	[redacted]	Death unrelated to admitting diagnosis; Discharge category should be "GC"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "HM"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "CE"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "CE"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "HS"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "PN"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "HS"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "HS"
[redacted]	[redacted]	Death unrelated to admitting diagnosis; discharge category should be "HS"
[redacted]	[redacted]	Transferred to VA Hospital then expired
[redacted]	[redacted]	Transferred to VA Hospital then expired
[redacted]	[redacted]	Transferred to VA Hospital then expired
[redacted]	[redacted]	Transferred to VA Hospital then expired
[redacted]	[redacted]	Transferred to Providence Hospital, then expired
[redacted]	[redacted]	Expired in house fire after discharge
[redacted]	[redacted]	Expired in house
[redacted]	[redacted]	Expired in house
[redacted]	[redacted]	Expired in house
[redacted]	[redacted]	Expired in house
[redacted]	[redacted]	Expired in house
[redacted]	[redacted]	Expired after discharge

OMH OCONEE MEMORIAL HOSPITAL

October 26, 1987

William L. Roper, MD
Administrator, Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Re: Mortality Data - Medicare Provider #420009

Dear Dr. Roper:

This is in response to your letter, dated 9/21/87, concerning the above referenced caption.

In verifying the accuracy of the data, the discrepancies specified on the enclosed worksheet were revealed. The HCFA case listing denoting the identified errors is also enclosed.

At Oconee Memorial Hospital, mortality review is considered one of several important criterion that is utilized by our quality assurance program in evaluating the quality and appropriateness of patient care.

Thank you for the opportunity to respond to your report.

Sincerely,

W.H. Hudson
President

Enclosures

lw

PHONE (803) 882-3351 • POST OFFICE BOX 858 • SENECA, SOUTH CAROLINA 29679-0858

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

OCONEE MEMORIAL HOSPITAL

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	25	0	25	0
CE -- Cerebrovascular Accidents	15	3	15	3
GC -- Gastrointestinal Catastrophes	10	0	10	0
GI -- Gastrointestinal Disease	4	0	4	0
GU -- Urologic Disease	0	1	0	1
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	1	0	1	0
HM -- Severe Chronic Heart Disease	10	2	10	2
HS -- Severe Acute Heart Disease	23	0	23	0
ME -- Metabolic/Electrolyte Disturbances	5	3	5	3
OP -- Orthopedic Disorders	1	0	1	0
PN -- Pulmonary Disease	32	4	33	3
RN -- Renal Disease	0	0	0	0
SE -- Sepsis	3	0	3	0
TR -- Severe Trauma	2	0	2	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	12	3	12	3
Total -- All Categories	143	16	144	15

Incorrect Data:
Patient [redacted] listed Date of Admission 11/10/86, Date of Discharge 11/22/86, Date of Death 11/28/86.
Medical Record shows last Date of Admission 11/27/86, Date of Discharge 11/29/86, Date of Death 11/29/86.

Patient [redacted] listed Date of Death 05/31/86. Nursing Home reports Date of Death 05/24/86.

SC 61.1

Orangeburg-Calhoun
Regional Hospital

October 26, 1987

William L. Roper, M.D.
Health Care Financing Administration
Hubert H. Humphrey Building
Room 314-G
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Roper;

RE: Response to HCFA release of hospital-specific mortality data

DATA VERIFICATION
The data used by HCFA indicate that a total of 279 Medicare patients admitted to Orangeburg-Calhoun Regional Hospital died within 30 days of admission. Of these, 232 died while still a patient of the hospital, while 47 died after discharge. We have no way of verifying whether the number of Medicare beneficiaries treated at Orangeburg-Calhoun Regional Hospital is correct. Our own records indicate that of the 279 Medicare patients who died within 30 days of admission, 48 were still alive at the time of discharge. It is impossible to determine the percentage of the 48 patients dying after discharge who were in fact alive after discharge as information concerning death after discharge is not contained in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

RESULTS OF PRELIMINARY MEDICARE RECORD REVIEW
1. The statistical methodology and grouping of the sixteen catagories of patients cannot be duplicated and analyzed. However, it is misleading to consider patients with chronic renal failure and hypertensive cardiovascular disease (code 404.1) as "low risk heart disease". Two of eighteen deaths (or 11%) in this catagory were related to this condition.

2. Review of the records show a considerable number of patients whose principal diagnostic information differ significantly from the determined cause of death. As an example is a patient admitted with gastroenteritis as principal diagnosis. The patient had numerous other problems including congestive heart failure, previous cerebrovascular accident, decubitus, hyponatremia and dehydration.

3. In verifying the reported deaths through hospital and physician records, 15 date errors were discovered as follows:

3000 ST. MATTHEWS ROAD ■ ORANGEBURG, SOUTH CAROLINA 29115-1498 ■ (8 3) 533-2200

HCFA NUMBER	PATIENT NAME	ADMISSION DATE	DATE OF DEATH
[redacted]	[redacted]	5/27/86	5/28/86
		3/12/86	3/26/86
		11/23/86	11/24/86
		12/23/86	12/26/86
		12/06/86	12/118/86
		5/16/86	6/11/86
		9/5/86	9/6/86
		1/30/86	1/30/86
		3/5/86	3/5/86
		12/17/86	12/24/86
		9/28/86 *	9/29/86
		6/15/86 *	6/15/86

*indicates more than one error

CONCLUSION

In conclusion, although the data shows that Orangeburg-Calhoun Regional Hospital is within the parameters for "expected" deaths, we feel mortality alone is not a true indicator of quality care. We appreciate HCFA's efforts to impact care for its beneficiaries.

Sincerely,

H.F. Mabry
President

PROVIDENCE HOSPITAL
2435 FOREST DRIVE • COLUMBIA, SOUTH CAROLINA 29204 • TELEPHONE 803/256-5300

Medicare Provider #42-0026

October 22, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Dear Dr. Roper:

Providence Hospital has reviewed the 1986 Medicare mortality information forwarded with your letter of September 21, 1987.

Providence Hospital does not agree that the release of this mortality information can serve a useful purpose in assisting Medicare patients and others to come to conclusions about the quality of care.

We have also found discrepancies in the data that you supplied. However, in our attached response, we have chosen to limit our concerns to the conceptual approach and to the real possibilities of erroneous conclusions that will be drawn by the public from the release of this information.

Very truly yours,

Sister Mary Jacob

Sister Mary Jacob
President

enclosure

lkf/10227-4

Sponsored by the Sisters of Charity of St. Augustine

PROVIDENCE HOSPITAL
2435 FOREST DRIVE • COLUMBIA, SOUTH CAROLINA 29204 • TELEPHONE 803/256-5300

Medicare Provider #42-0026

RESPONSE TO HCFA DATA

Providence Hospital supports efforts to measure, monitor, and improve the quality of care provided patients in all health care settings.

The data provided by hospitals to HCFA on Medicare patients was designed to report on the costs of treating patients according to the clinical diagnosis that necessitated their hospital admission. As such, this financial data base does not contain relevant clinical information about the patient's condition and course of treatment which is essential for arriving at valid assessments of quality of care.

The analysis that HCFA released does not take into account the patient's medical history, the severity of his or her illness, the seriousness of any coexisting or developing complications, or whether the hospital is a general hospital or a major referral center which is likely to receive and treat the most complicated cases. Moreover, the analysis performed by HCFA shows mortality rates among Medicare patients by admitting diagnosis, not by cause of death.

The hospital currently employs personnel who monitor quality assurance activities in a coordinated departmental program.

Although HCFA acknowledges that its analysis of mortality is not intended to be interpreted as a measure of the quality of care provided by individual hospitals, its release in its present form is bound to be misinterpreted by the general public as a measure of quality of care. Accordingly, HCFA commits a disservice to the public, to hospitals, and to other health care providers when it releases this information in its present form ignoring the risk that it may be misinterpreted.

Sponsored by the Sisters of Charity of St. Augustine

Richland
Memorial Hospital

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Richland Memorial Hospital wishes to include the following comments to the publication of selected mortality information concerning Medicare patients treated during 1986. Although HCFA has acknowledged that quality of patient care cannot be judged from this data, our concern is that the manner in which the data is presented will lead to misinterpretation. Quality of care is determined utilizing many other indicators in addition to mortality. Since the HCFA risk of mortality methodology is not known to us, we cannot validate, reproduce, or determine the appropriateness of the data presented. We do know, however, that the methodology utilized, specific factors affecting this hospital, and errors demonstrated in the data affect the validity of the report.

I. METHODOLOGY:

A. Predicted Range of Mortality:

Only 5 patient characteristics (age, sex, prior 1986 hospitalizations, transfer status from another acute care hospital, and certain selected coexisting conditions) were utilized in determining the predicted risk of death. Whether these are the most significant factors in determining risk of death is unsubstantiated; they do not reliably predict hospital mortality rates. Severity of illness, stage of disease, surgical intervention, personal preventive health care, patient compliance, other medical and psychological conditions coexisting or arising during hospitalization, and patient desire for continued mechanical life support or heroic life-sustaining measures have substantial impact upon risk of mortality.

B. Diagnostic Categories:

Grouping deaths into 16 broad categories is misleading and does not provide specific information on diagnoses and procedures. Surgical Coronary Artery Bypass Grafting operations are included in the same group as medically treated heart conditions. More dramatically, the more than 100 diagnoses included in the Gastrointestinal Disease category demonstrates the multiple and varied conditions lumped together. Such broad categories make meaningful analysis impossible.

Five Richland Medical Park, Columbia, SC 29203 803/765-7 00

C. Cause of Death:

The "All Causes" indicated on the report does not reflect the cause of death but rather the reason for admission to the hospital. Many patients in the final stages of cancer, kidney, and heart disease were admitted to the hospital with conditions such as pneumonia, infection, or bleeding associated with their debilitated condition. These cases are attributed to the admitting diagnosis and not the underlying cause of death.

D. 30-Day Post-Admission Deaths:

The use of 30-day post-admission deaths attributes deaths to the hospital from conditions unrelated to those treated by the hospital or which develop at home or in other facilities which the patient was discharged into, i.e. nursing home. Factors contributing to death after discharge, for instance, automobile accident, are not considered.

E. Data Source:

The data was obtained from UB-82 bills submitted to the fiscal intermediary for reimbursement. Patient bills were never developed or intended as a basis for quality review or as model for mortality study and contain insufficient information for evaluation. Only through clinical review of the patient's medical record can causes of mortality and quality be reviewed.

F. National Averaging:

The methodology is based on national averages. Tertiary care hospitals, such as Richland Memorial, provide referral, highly specialized technical services to patients with higher illness severity than average patients.

II. HOSPITAL-SPECIFIC FACTORS:

A. Specialized Services:

Patients transferred back to Veteran's Administration hospitals and South Carolina State Mental Health Hospitals who subsequently died were attributed to this hospital. In addition, the nature of services provided here, such as infectious disease specialists, regional trauma center, cancer center, and teaching programs, bring a greater number of patients with more severe conditions.

B. Actual Mortality Rates

Actual mortality rates were higher than the predicted ranges in the Sepsis and Gastrointestinal Disease categories. Patients in both categories had major conditions, such as cancer or heart disease, contributing to their deaths along with multiple additional diagnoses. 25 of the 43 patients in the combined categories, in agreement with their families and physicians, requested no resuscitative efforts, no further treatment, or no mechanical life-sustaining measures on admission or during hospitalization.

Of the 19 Sepsis deaths, 4 were transferred to Richland Memorial from acute-care hospitals and 8 from nursing homes. 14 patients requested basic life support only.

Over 100 diagnoses are included in the Gastrointestinal category. The 24 deaths reported for this category fell into seven of the most severe conditions. 11 of these patients requested basic life support only or refused blood products.

III. ERRORS IN HCFA DATA:

A. Errors in Gastrointestinal Disease Category:

Two cases were grouped to this category in error which may have caused the actual mortality rate to exceed the predicted range:

Case 1 - the principal diagnosis code of hepatic coma was inadvertently omitted.
This error was detected by the hospital upon review of the Medicare Remittance Notice and an adjustment was requested and received by the fiscal intermediary 1/2/87. The adjustment was not included in the data sent to HCFA.

Case 2 - listed death occurring after discharge for hernia repair. The patient was actually readmitted to the hospital for respiratory failure and expired in the hospital from the pulmonary diagnosis.

B. Total Medicare Admissions:

The HCFA report indicates 3,053 Medicare patients were admitted to the hospital with 366 patients dying. Our records indicate 5,135 admissions, which would reflect a 7% mortality rate rather than the 12% reported. This discrepancy presumably reflects multiple admissions by the same beneficiary.

A separate report documenting 24 errors in classification, admission/discharge dates, or date of death is attached.

IV. QUALITY ASSURANCE PROGRAM:

The Medical/Dental Staff of Richland Memorial Hospital is committed to rendering quality patient care. Each department has implemented a Quality Assurance/Risk Management Plan which provides a systematic process of monitoring and evaluating the quality and appropriateness of patient care and surveillance of professional performance.

Information is collected and evaluated monthly by each department with review of aggregate data and individual cases. One of the elements reviewed is any death in the hospital, excluding those of "do not resuscitate" on admission. A physician reviews the death to determine appropriateness of diagnostic studies and treatment instituted, appropriateness of consult and support services utilized, and the cause and appropriateness of treatment for any complications which arose. When opportunities to improve patient care are identified, action is taken as deemed necessary by the medical department. Findings, conclusions, and actions resulting from each departmental program are reported to the Medical Executive Committee, Medical Staff Credentialing Committee, Medical Services Committee, and the Board of Trustees.

In addition to physician involvement, the Quality Assurance Program incorporates a complex system of support/ancillary services. These services, i.e. Nursing, Physical Therapy, and Pharmacy, have all developed quality assurance plans and monitor the quality and appropriateness of services provided to patients.

I hope these comments will provide assistance in evaluation of this report.

Sincerely,

William L. Ivey
President/CEO
Medicare Provider #420018

MEDICARE PROVIDER #420018
Richland Memorial Hospital
Columbia, S.C.

ERRORS IN HCFA DATA

CASE #	HCFA REPORT	HOSPITAL REVIEW
[redacted]	Principal Dx 5715; GI category	PDx 5722, GC category; correction submitted and received on adjustment by FI
	Adm/Dc dates 9/10-9/12, death 9/24; GI category	Readmitted 9/16 until death 9/24; PN category
	Adm/Dc dates 6/17-6/20; death 6/24	Patient died 6/20 in hospital
	Adm/Dc dates 1/3-1/11; death 1/31	Patient died 1/11 in hospital
	Adm/Dc dates 1/17-1/18; death 1/31	Patient transferred to VA Hospital 1/18
	Adm/Dc dates 4/16-4/26; death 4/25	Patient pronounced 00:10; 4/26
	Adm/Dc 8/10-8/20; death 8/21	Patient died 8/20 in hospital
	Adm/Dc 4/21-4/21; death 4/22	Patient died 4/21 in hospital
	Adm/Dc 11/14-12/12; death 11/24	Patient died 12/11 in hospital
	Adm/Dc dates 6/23-6/24; death 6/30	Patient died 6/24 in hospital
	Adm/Dc dates 10/8-10/26; death 10/31	Patient died 10/26 in hospital
	Adm/Dc dates 3/11-3/23; death 3/31	Patient died 3/23 in hospital
	Principal DX 7585; UN	Correct PDX is 785.59; UN
	Adm/Dc dates 9/12-9/21; death 9/20	Patient died 9/20 in hospital
	Adm/Dc dates 6/18-6/25; death 6/30	Patient died 6/25 in hospital
	Adm/Dc dates 12/21-12/24; death 1/18/87	Patient readmitted 1/5 until death 1/18; 1987 case
	Adm/Dc dates 12/17-12/21; death 1/2/87; ME	Patient readmitted 12/30 until death 1/2 CA category
	Adm/Dc dates 1/2-1/24; death 1/31	Patient died 1/24 in hospital
	Adm/Dc dates 8/3-8/29; death 8/28	Patient died 8/28 23:55 in hospital
	Adm/Dc dates 1/27-1/30; death 1/31	Patient died 1/30 in hospital
	Adm/Dc dates 2/20-2/23; death 2/22	Patient died 2/22 in hospital
	Adm/Dc dates 8/16-8/16; death 8/31	Patient died 8/16 in hospital
	Principal Dx 53140; GI category	Correct PDx 4107; HS category
	Principal Dx 5762; GI	Correct PDx 1521; CA category

SC 65.4

SELF MEMORIAL HOSPITAL

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Reference: Hospital ID Number 420071

Dear Dr. Roper:

I was pleased to find that Self Memorial Hospital's mortality rates are within the predicted ranges of mortality as provided in the recent Health Care Financing Administration Mortality Study. We, the staff and employees of Self Memorial, pride ourselves in the service we provide and have a great degree of confidence in the quality of our care.

While I would like to take the position that the Mortality Study has in fact validated Self Memorial's high level of quality care, I am unwilling to do so because serious questions and concerns remain regarding the validity of the Study. In the first place, the Study was limited to analyzing only five patient characteristics - age, sex, admitting diagnosis, whether the patient had previous hospital admission(s) and/or was transferred from another hospital, and the presence or absence of selected complications. While these factors are of obvious importance, they alone cannot reliably predict a given hospital's mortality rate. Additional factors such as the patient's general health status, the severity of the patient's illness, the patient's psychological condition, and the degree of family support all have significant impact on the potential for death. Secondly, the statistical model for the Study has not been validated nor has the hospital community been adequately informed of the complete methodology used to estimate predicted mortality rates. It is obviously impossible to agree or disagree with any study if not adequately apprised of the total study methodology.

Again, I am confident in the quality of care provided by Self Memorial Hospital and in our internal hospital quality assurance programs that help us meet this high standard.

Clearly, the public needs a way to reliably compare hospital quality levels. Unfortunately, no one has yet developed such a mechanism. While these mortality statistics may be an early step towards finding such a means of comparison, their usefulness in defining quality is highly questionable.

Greenwood, South Carolina 29646 • (803) 227-4111

I look forward to your continued efforts (and those of others) to develop a study methodology that will reliably validate the quality of care rendered by hospitals. Until such a methodology is fully developed, the public should not place much confidence in mortality statistics.

My advice to those seeking to make hospital quality comparisons at this point in time is to ask your physician.

Sincerely

J. L. Dozier, Jr.
President

/hm

SELF MEMORIAL HOSPITAL

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Reference: Hospital ID Number 420071

Dear Dr. Roper:

Please find attached a listing of data corrections pertaining to the Health Care Financing Administration Mortality Study for Self Memorial Hospital. None of the corrections change the mortality calculations and are provided solely to update our records.

Sincerely,

J. L. Dozier, Jr.
President

/hm

Enc.

Greenwood, South Carolina 29646 • (803) 227-4111

PT ID	NAME	DG CAT.	ERROR CATEGORY	CORRECT INFOMATION
[redacted]	[redacted]	HS	Adm & D/C dates	Adm 12-28-86 D/C 1-3-87
[redacted]	[redacted]	CA	Date of Death	9-6-86
[redacted]	[redacted]	CA	Date of Death	4-5-86
[redacted]	[redacted]	CA	D/C & Death Dates	D/C 3-29-86 DOD 3-29-86
[redacted]	[redacted]	CE	Date of Death	4-26-86
[redacted]	[redacted]	CE	Dates of Adm,Death,D/C	Adm 3-16 D/C 3-16DOD3-16
[redacted]	[redacted]	CE	Date of D/C	3-26-86
[redacted]	[redacted]	CE	Date of Death	4-26-86
[redacted]	[redacted]	CE	Date of Death	7-28-86
[redacted]	[redacted]	HM	Date of Death	8-24-86
[redacted]	[redacted]	HM	Date of Death	5-16-86
[redacted]	[redacted]	HM	Date of Death	4-18-86
[redacted]	[redacted]	HS	Dates of DC & Death	D/C 3-20-86 DOD 3-20-86
[redacted]	[redacted]	HS	Adm & D/C Dates	Adm 10-2-86 D/C 10-14-86
[redacted]	[redacted]	HS	D/C & Death Dates	D/C 9-8-86 DOD 9-8-86
[redacted]	[redacted]	HS	Discharge Date	7-14-86
[redacted]	[redacted]	PN	Date of Death	7-16-86
[redacted]	[redacted]	PN	D/C & Death Date	D/C 2-1-86 DOD 2-1-86
[redacted]	[redacted]	PN	Date of Death	12-23-86
[redacted]	[redacted]	PN	Date of Death	9-10-86
[redacted]	[redacted]	UN	Dates of D/C & Death	D/C 6-11-86 DOD 6-11-86
[redacted]	[redacted]	UN	Dates of D/C & Death	D/C 10-17-86 DOD 10-17-8

115 Medford Drive
P O Box 506
Darlington, South Carolina
29532
Telephone 803 393-4007

Southland Medical Center

October 20, 1987

William L. Roper, MD
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Southland Medical Center
420050

Dear Dr. Roper:

Having reviewed your letter of September 21, 1987 regarding the selected mortality information for Southland Medical Center, we have discovered one error in your report. This error concerns a duplication of a patient [redacted] This error has caused your statistics to reflect a total of 27 deaths versus the appropriate count of 26. We request this data be corrected prior to release.

As you stated in your correspondence, hospital comments will be provided with your publication. We request you include the following general comment for our respective mortality information.

"Southland Medical Center, a primary acute care hospital with a total bed compliment of 52 acute care beds, 24 of which are classified as skilled nursing beds (swingbeds), has received from the Health Care Financing Administration a reported mortality rate of 11%. Review of each case shows that the mean age of those patients expiring at this facility is 82.5 years. The hospital, as accrediated by Joint Commission, is completely committed to a quality assurance procedure by which the activities of each member of the Medical Staff and each hospital department is reviewed and monitored on a concurrent basis. Selective retrospective review of Medicare admissions are reviewed by the South Carolina Peer Review Organization, which is an agency under contract by the Health Care Financing Administration. The data that will be published by the Health Care Financing Administration, has been extracted essentially from patient billing information and is not based on quality monitors or severity of illness for the respective patients."

We request your publication of the above comments with our statistics so that the public will be better informed as to the information they receive.

We must voice our opposition to the practice of publication of mortality data for any health care facility as the uninformed reader, that is the general public, will in most cases not have sufficient data or an understanding of the information to achieve any meaningful conclusions.

Sincerely,

Albert H. Michaels

Albert H. Michaels
Administrator

AHM/dp

SPARTANBURG HOSPITAL SYSTEM
101 East Wood Street • Spartanburg, South Carolina 29303
Tel.: (803) 591-6000

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

RE: Spartanburg Regional Medical Center
Hospital: 42007

Dear Dr. Roper:

Spartanburg Regional Medical Center has always been concerned with the quality level of care rendered to ALL patients regardless of payor source. The staff of the hospital and the medical staff have a proactive commitment to the provision of a high quality level of care for our patients. For this reason, we are heartened by the shift in posture HCFA is taking in expressing concern for quality of care rather than focusing concern primarily on the financial aspects of care provided to the Medicare population.

We recognize the efforts on behalf of HCFA to improve the information through changes in the methodology over the 1986 release and anticipate HCFA will continue efforts to further improve the information to more closely parallel quality of care. As HCFA has substantiated by their comments, there are technical limitations to the statistical model used to construct the data. While Spartanburg Regional Medical Center is within the range of predicted mortality rates, we would offer the following considerations to reduce the technical limitations and provide more meaningful information to the public:

-- The mortality percentages are not truly reflective of the actual overall hospital experience as the data only encompasses those Medicare patients whose last admission in 1986 was attributed to a particular hospital and whose mortality occurred within 30 days post-admission. Also included are deaths occurring outside the institution that may or may not have been related to the reason for treatment at a particular hospital.

-- There is disparity is the number of Medicare cases shown by HCFA receiving treatment at Spartanburg Regional Medical Center. The number of Medicare admissions attributed by HCFA to Spartanburg Regional Medical Center was 4464 when in actuality the institution treated over 7300 Medicare patients in this period of time.

-- As the information was extrapolated from Medicare billing data, only five medical diagnoses and three surgical procedures were reported due to space constraints on the billing form. There is concern because a true clinical picture of the individual patient cannot be demonstrated. Most Medicare patients have more than five medical conditions that require treatment.

-- Certain patient characteristics were considered; however, we feel there are other patient characteristics that do impact on the patient's ability to have a more optimal outcome. We would suggest severity of illness, patient's health status prior to admission, patient's psychological condition, and family support are important considerations.

-- As hospitals differ in service characteristics, the data would be more meaningful if there were consideration of the differences. For example, Spartanburg Regional Medical Center serves as a tertiary referral center that by nature receives more critically ill patients at the time of admission. Designation as a Level I Trauma Center translates into admission of accident victims that surrounding hospitals do not have the ability to treat. We also provide an inpatient hospice unit for the terminally ill to provide respite care for the families who so unselfishly devote their energies and time in caring for their dying family members. We provide an open-heart surgery program for the residents of this area. In addition, we have a specialty unit to provide inpatient renal dialysis.

Analysis of the HCFA data reflected that 16% of the deaths attributed to Spartanburg Regional Medical Center occurred outside the hospital setting. Several of the deaths occurred at other hospital facilities but were in the data for our facility. In an overwhelming majority of the cases, the reason for admission and treatment was not the cause of death. For example, the HCFA data lists Dehydration as the cause of death for approximately 4% of our patients. Investigation of these cases revealed patients who were admitted for treatment of dehydration but who had widespread cancer that was the actual cause of death.

We are concerned that mortality data that is not based on the actual cause of death is misleading to the public for use as an indicator of hospital quality. The family physician remains the best source for a patient to consult in choosing a hospital that can provide the quality of care and services the patient needs.

Sincerely,

SPARTANBURG REGIONAL MEDICAL CENTER

Charles C. Boone
President

CCB/dp

SPARTANBURG HOSPITAL SYSTEM
101 East Wood Street • Spartanburg, South Carolina 29303
Tel.: (803) 591-6000

SPARTANBURG Regional Medical Center
Hospital: 42007

CORRECTIONS TO MORTALITY DATA

[redacted]
DOA at BJ Workman Memorial Hospital
Woodruff, SC

[redacted]
HCFA Date of Death incorrect. Correct Date of Death is 4-8-86.

[redacted]
Patient died at Cherokee Memorial Hospital
Gaffney, SC

[redacted]
Patient died at Byrnes Medical Center
Columbia, SC

[redacted]
HCFA Date of Death incorrect. Correct Date of Death is 12-23-86.

Saint Eugene Community Hospital
Dillon, South Carolina

Medicare Provider #: 420005

PUBLIC RESPONSE TO HCFA MORTALITY DATA RELEASE

Quality patient care continues to be the primary goal of Saint Eugene Community Hospital. Through its ongoing evaluation and monitoring of patient care delivered in the hospital, Saint Eugene Community Hospital currently maintains accreditation by the Joint Commission on the Accreditation of Health Care Organizations (JCAHO), a not-for-profit organization requiring professional standards of care throughout the nation.

For these reasons, we are glad to see that some effort has begun on behalf of Medicare to evaluate the quality of care delivered to its beneficiaries. However, the mortality data presently being released by Medicare is not the answer. The data generated does not contain any indication of the quality of care that has been delivered. Furthermore, following review of the hospital records, it was identified that:

1. Forty-four percent of all mortalities attributed to inpatients at Saint Eugene Community Hospital were secondary to terminal illness, such as cancer. Because Saint Eugene Community Hospital is the only hospital in the county and no hospice care is available, we serve as the source of supportive care for the terminally ill patient and family.

2. Approximately 16% of the mortalities attributed to Saint Eugene Community Hospital occurred following discharge from the hospital. A death within 30 days of discharge from a hospital does not measure the quality of care provided by the hospital or physician. The causes of these deaths are not given, and the connections, if any, to the patient's hospital stay is not indicated. Therefore, unless the patient's death can be related to the hospital stay, it should not be included in a list of hospital mortality statistics.

3. The remainder of all mortalities attributed to Saint Eugene Community Hospital were indeed very high risk patients and patients whose illnesses have a significantly high risk for mortality, such as complicated or severe heart attacks, septicemia, blood poisoning, and severe respiratory diseases.

4. Five percent of the mortalities occurring at Saint Eugene Community Hospital were results of secondary illnesses that developed after admission.

Saint Eugene Community Hospital is concerned with the mortality data currently being released because of the methodology used to collect the data and the fact that this has no bearing on the quality of care rendered by hospitals and physicians. This concern is outweighed only by our dedication to provide quality patient care.

At Saint Eugene Community Hospital, each person's life is of great value and deserves respect and care in all its stages, from conception until death. This means we are dedicated to using our professional skills in caring for all our patients, including those whose illnesses are incurable and the expected outcome is death.

Saint Eugene Community Hospital, a member of the SSM Health Care System, is committed through its Mission "to bring a comprehensive service approach to persons of all ages and social strata, with special concern for the poor. This mission, our expression of the healing ministry of Christ, demands that we be advocates and agents of change in promoting integration of body, mind and spirit within ourselves and in our relationships with others, God and our environment. In solidarity with the poor, we collaborate with other persons and groups to promote wholistic health care and healing in a just and compassionate way."

October 22, 1987

HCFA
2-D-2 Meadows East Building
6325 Security Boulevard
Baltimore, MD 21207

Dear Sir or Madame:

You will find St. Francis Hospital's comments on the HCFA mortality data enclosed.

Sincerely,

Kathy E. Diener, R.N., M.S.N.
Director
Quality Assessment

KD/sr

St. Francis Hospital
Member of Franciscan Sisters of the Poor/Health System, Inc.
One St. Francis Drive Greenville, SC 29601 (803) 255-1000

COMMENTS ON THE HCFA MORTALITY DATA
ST. FRANCIS HOSPITAL
GREENVILLE, SOUTH CAROLINA

The data used by HCFA indicate that 2,596 Medicare patients were admitted to St. Francis Hospital in 1986, and of these 240 patients died within 30 days of admission; 198 died while still a patient of St. Francis, while 42 died after discharge. Our records show that 4,236 Medicare patients were admitted in 1986, this discrepancy presumably reflects multiple admissions of individual beneficiaries. St. Francis Hospital has verified that 240 of these patients died within 30 days of admission; 198 while patients of St. Francis and 42 after discharge.

St. Francis Hospital is pleased that our mortality rates are within HCFA's predicted ranges, however we are concerned with the validity of HCFA's study, which does not reflect the high quality of care provided by our facility. The methodology used to determine mortality was developed to monitor Medicare billing; not to monitor hospital quality or mortality factors. HCFA's data does not reflect severity of illness, obscures medical conditions and exact causes of death; and excludes psychosocial factors which impact on mortality.

St. Francis Hospital provides the highest quality care and conducts a wide range of quality assurance activities, which include accreditation by the Joint Commission on Accreditation of Hospitals; medical staff quality assurance plans, and hospital departmental quality assurance plans. These plans ensure that our high quality of care is maintained by continuous evaluation of the quality and appropriateness of the services which St. Francis Hospital provides to its patients and to the community.

St Francis Xavier Hospital

October 23, 1987

William L. Roper, M.D., Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

The purpose of this letter is to respond to your correspondence of September 21, 1987 regarding HCFA plans to publish selected mortality information about all short term acute care hospitals which treated Medicare patients in 1986.

Upon review of your information, I have several comments that I hope you will consider and accept in the spirit it is given. First of all, we are pleased that Saint Francis Xavier Hospital's rates are all within HCFA parameters, but I feel the methodology does not reflect the high quality of care provided by our hospital. Also, I was unable to determine when your range of predicted mortality rates became statistically valid. One example that I feel to be unusual is the diagnostic category "Gynecologic disease", whose range of predicted mortality rates are 0 to 98%. I must question the statistical validity of this category. In addition, it does not appear that you are including the acuity of the patient mix or the type of services offered such as hospice care. Obviously, acuity and unique services would have some bearing on the actual mortality rate.

In addressing actual mortality rates, we have discovered several probable errors in the calculation of the category. I have listed below the principal diagnosis and the cause of death. As you will note, one should not have been included in our mortality rate at all and the others should most probably have been calculated in another category.

135 Rutledge Avenue
Charleston, S.C. 29401
(803) 577-1000

Patient	Diagnosis	Cause of Death
[redacted]	TURP (Surgery)	Shotgun wound to chest
[redacted]	Pneumonitis	1-Cardiopulmonary arrest 2-Multiple cerebral infarctions
[redacted]	Removal of gallbladder	Cardiopulmonary arrest
[redacted]	1-Malignant neoplasm of bronchitus/lung 2-COPD	Cardiopulmonary arrest
[redacted]	1-Neoplasm of uncertain behavior of liver/biliary passages	Myocardial infarction

Although I think your intent in publishing this information is good, I sense that it could very possibly be catastrophic for some hospitals if the public is not educated as to what the figures actually mean in the context that it is disseminated and I do not feel the public has had this education.

Thank you for this opportunity.

Sincerely,

Douglas L. Fairfax

Douglas L. Fairfax
President

JBD:mlb

HCA Trident Regional Medical Center

October 27, 1987

Mr. Harvey Brooks
Health Care Financing Administration
Health Standards and Quality Bureau
2-D-2 Meadows East Building
6325 Security Boulevard
Baltimore, Maryland 21207

Dear Mr. Brooks:

Attached are the comments on the mortality data from Trident Regional Medical Center.

As indicated in the comments, a comparison of the data provided with our records indicates that in seven (7) cases the principal diagnosis is incorrect which results in a change in diagnostic category. In addition, our records indicate that in six (6) cases, the patient actually died in the hospital and not after discharge and in fourteen (14) cases the age is incorrect. These cases are indicated on the attached copy of the listing. We would request that these discrepancies be corrected prior to publication.

I wish to thank you for the opportunity to review the data and provide comments prior to publication in December.

Sincerely,

Frank J. DeMarco, III
Administrator

FJD/rh

Attachments

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

9330 Medical Plaza Drive
Charleston, South Carolina 29418-9195
Tel. (803) 797-7000
A Subsidiary of HCA The Healthcare Company

HCA Trident Regional Medical Center

COMMENTS ON THE HCFA MORTALITY DATA
Trident Regional Medical Center
Charleston, South Carolina
ID Number: 420079

Data Verification

The data used by HCFA indicate that a total of 258 of the 2195 Medicare patients admitted to Trident Regional Medical Center (TRMC) died within 30 days of admission. Of these, 226 died while still a patient of the hospital, while 32 died after discharge. Our own records indicate that 3560 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to the hospital. We have no way of verifying whether the number of Medicare patients treated at TRMC is correct. In addition, it is impossible to determine the percentage of the 32 patients dying after discharge who were in fact alive 30 days after admission, as information concerning death after discharge is not included in the patient's medical record.

A comparison of the HCFA data with our records indicates that in seven (7) cases the principal diagnosis is incorrect which results in a change in diagnostic category, in six (6) cases the patient actually died in the hospital and not after discharge and in fourteen (14) cases the age is incorrect.

Services Resulting in a Higher than Average Mortality Rate

TRMC's actual mortality rate falls outside of the range of predicted mortality rate in only one category, cancer. Since the model used by HCFA does not take include measures of severity (i.e. how ill the patient was at the time of admission), nor whether the patient had a terminal illness, hospitals treating large numbers of severely ill patients or with specialized programs for the terminally ill may have higher than predicted mortality rates. TRMC does offer a full

9330 Medical Plaza Drive
Charleston, South Carolina 29418-9195
Tel. (803) 797-7000
A Subsidiary of HCA The Healthcare Company

range of services for the diagnosis and treatment of patients with cancer. The services provided include diagnostic testing, surgery, radiation therapy and chemotherapy. As a result, more patients with cancer, including those whose condition is terminal, are treated at TRMC than at a hospital which does not provide these services. In addition, Trident is becoming a referral center for some of the smaller hospitals in the surrounding area. As a result, the total number of cancer patients requiring specilized treatment is higher than would be expected for a hospital of similar size without these services. Therefore, it is likely that TRMC will have a higher mortality rate for this type of patient.

Results of Preliminary Medicare Record Review

An initial review of the records of the Medicare patients who died of cancer indicates that these patients had several admissions for the treatment of the disease and that at the time of the last admission in 1986 the patient's condition was considered to be terminal and death was expected. There were five (5) cases in which the patient died after discharge. These cases are impossible to evaluate as TRMC has no information on the actual cause of death, which may in fact be unrelated to the diagnosis of the last admission.

It should be noted that deaths from cancer as well as deaths from all other causes are reviewed as part of the overall, comprehensive quality assurance program. This review is performed to identify potential quality problems and when such problems are identified, appropriate action is taken. While mortality rates can indicate areas of potential quality problems, it is only through the process of peer review that quality can be adequately evaluated.

THE TUOMEY HOSPITAL

129 NORTH WASHINGTON STREET - SUMTER, SOUTH CAROLINA 29150

LOUIS H. BREMER, JR.
Administrator

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

SUBJECT: MEDICARE PROVIDER #42-0070

Your information shows that there were 1752 Medicare admissions to Tuomey Hospital in 1986. Our own records indicate that 2813 Medicare admissions occurred in 1986. We have no way of verifying your information as we are not allowed to review your methodology.

The data used by HCFA indicates that a total of 217 Medicare patients admitted to Tuomey Hospital died within 30 days of admission. Of these, 195 died while still a patient of the hospital, while 22 died after discharge. Our records show that 4 of the 195 patients that HCFA identifies as expiring while a patient at Tuomey Hospital were still alive at the time of discharge. In fact, one of the patients that HCFA data lists as expired, is in fact still alive. He was recently seen in his physician's office. His name is [redacted] HCFA number [redacted] Attached is a listing of other errors in the HCFA data base that we have identified using hospital records and the Office of Vital Statistics at the Health Department.

It is unfortunate that HCFA is releasing flawed data to the public as an indicator of quality of care. Even though Tuomey Hospital falls below the statistical mortality norms that are used to release this information, we do not accept the mortality data as an appropriate indicator of quality. Medicare mortality rates reveal why a patient was admitted to the hospital, not why a patient died. If a patient is admitted for an appendectomy, for example, and suffers a heart attack and dies while in the hospital, the data will show appendicitis as the cause of death.

As an industry, we advocate appropriate analysis of quality issues. We encourage HCFA to work with the health care industry to develop appropriate methodologies to address quality of care issues.

Sincerely,

Jay Cox

Jay Cox
Assistant Administrator

South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett

Board
Moses H. Clarkson, Jr., Chairman
Gerald A. Kaynard, Vice-Chairman
Oren L. Brady, Jr., Secretary
Barbara P. Nuessle
James A. Spruill, Jr.
William H. Hester, M.D.
Euta M. Colvin, M.D.

OCTOBER 22, 1987

Judy James, R.N.
Supervisor, Utilization Review
The Tuomey Hospital
129 North Washington Street
Sumter, S. C. 29150

[redacted]

Dear Ms. James:

A thorough search of the statewide indexes for deaths has been conducted for the years 1986 through August, 1987 and no record was located for the above-named individual(s) on the basis of information provided.

(X) If this information is needed for proof of death, we suggest that you contact the agency requiring proof to determine what other evidence will be accepted in the absence of a death certificate.

( ) We suggest that you contact the Office of the Probate Judge in the county where the original license was issued for a search of his records since the application and original license-certificate of marriage are retained in that office.

( ) We suggest that you contact the Office of the Clerk of Court in the county where the divorce would have been granted for a search of his records.

Very truly yours,

Ann G. Owens

(Mrs.) Ann G. Owens
Assistant State Registrar
Office of Vital Records and
Public Health Statistics

Enclosure: Receipt for Fee

VR-85 (Rev. 4/82)

LISTING OF CORRECTIONS

PATIENT ID NUMBER (HIC)	SURNAME FIRST 6 LETTERS	DATE OF DEATH
[redacted]	[redacted]	1/4/86
[redacted]	[redacted]	1/26/86
[redacted]	[redacted]	2/11/86
[redacted]	[redacted]	2/24/86
[redacted]	[redacted]	10/9/86
[redacted]	[redacted]	Still Alive
[redacted]	[redacted]	11/18/86
[redacted]	[redacted]	11/19/~~86~~
[redacted]	[redacted]	12/4/86
[redacted]	[redacted]	8/25/86

Wallace Thomson Hospital

P.O. DRAWER 789
UNION, SOUTH CAROLINA 29379

October 15, 1987

William L. Roper, M.D.
Administrator
Department of Health and Human Services
Health Care Financing Administration
PO Box 26684
Baltimore, MD 21207

Dear Dr. Roper:

I am responding on behalf of Wallace Thomson Hospital in Union, South Carolina to the mortality information which will be published specific to this facility for the treatment of Medicare patients in 1986.

I will focus my comments in two broad areas. First, I will address my udnerstanding and opinion of what HCFA is attempting to accomplish in the release of this information, and the methodology used to accumulate the mortality analysis. Second, I will address the information specifically pertaining to the mortality rates at Wallace Thomson Hospital, and as to the accuracy of this information and interpretive comments as to what I feel this mortality information demonstrates.

I am pleased that HCFA is looking into quality issues concerning the impact of the Medicare Program on its beneficiary. As you are well aware, we in the hospitals are very strongly biased that HCFA is solely concerned with consistently reducing the government obligation to pay for the inpatient and outpatient medical care provided to Medicare beneficiaries. The concern with quality care issues is highly commendable. However, I see very significant unresolved issues by equating quality care to hospital mortality patterns. Using mortality information as the sole criteria is a far too simplistic approach. I find the following flaws in this methodolo~7 which specifically are biased toward distorting mortality information for this hospital.

1. The methodology used fails to distinguish between rural sole community providers and other types of facilities. A sole community hospital absorbs all of the risk for the mortality of its Medicare population as distinguished from a multi-hospital community where hospitals tend to segregate the services offered and the types of patients treated.

2. The methodology used ignores medical staff composition and the availability of speciality services. On the active medical staff of Wallace Thomson Hospital, there are no physicians board eligible or certified in the low risk mortality categories as classified by HCFA; Ophthalmology, Gynecology, Gastroenterology, Urology, and Orthopedics. Medicare patients requiring these specialty services leave our community. The absence of these low risk hospital admissions significantly distorts the overall mortality rate of the Medicare patients treated at this facility. In other words, if these specialties were offered by the medical staff in this community it would significantly lower the mortality rate at our hospital, because of the higher mix of low risk patients. This methodology flaw also distorts the interpretive value of this information to the Medicare consumer. For instance, if a low mortality rate is specifically related to quality of service provided it would appear that this facility would be recommended for the treatment of Ophthalmologic disease, Gynecologic disease, and Orthopedic disease, for all three (3) specialties the hospital has a zero actual mortality rate. In fact, this is not the truth. I could not recommend this hospital as a treatment center for any of those three (3) diagnostic categories due to the absence of a specialty physician in our medical community.

The balance of my comments will pertain to the one hundred and twelve (112) patients that were listed as applicable to the mortality analysis for Wallace Thomson Hospital. Even though I cannot support the methodology used to conduct the mortality analysis, it is encouraging to the medical staff at this facility and our Medicare beneficiaries that the overall mortality rate and the mortality rates identified specific to diagnostic categories, fell within mortality ranges predicted by HCFA. All one hundred and twelve (112) cases were reviewed for statistical confirmation (i.e., age, sex, admission, discharge, and date of death). Three specific categories, cancer, urologic disease, and severe chronic heart disease were reviewed extensively due to the hospital's mortality rates being at the upper portion of the predicted range. In reviewing all this information the following comments are noteworthy.

1. All in hospital and out of hospital deaths were confirmed with no discrepancy noted.

2. All principle diagnoses were reviewed for accuracy. No discrepancies were noted. However, several co-existing conditions which may have contributed to death and perhaps caused a weighted difference were not coded. Specifically, patient histories of MI's, CVA's, and respiratory conditions were contributing factors.

3. The age and sex of each case was confirmed. No discrepancies noted.

4. In several of the categories noted, cases were found where the probable cause of death was different from the primary diagnosis. However, autopsies were not done to confirm the suspicions.

5. Wallace Thomson Hospital does not have a separate identifiable cancer treatment center, and patients of this diagnosis are usually referred for acute inpatient and outpatient treatment to a regional medical center some thirty (30) miles away. However, many of these patients are managed during the terminal stage of their disease at this facility. A natural question arises as to where the burden of mortality as it relates to quality should fall. Is it the responsibility of the facility rendering acute treatment or the facility managing the terminal stage of the disease?

6. Patients categorized with urologic disease and severe chronic heart disorders were found to be elderly in age, and with several coexisting medical conditions. It is noted that the primary diagnosis was frequently not felt to be the cause of death. Several coexisting conditions which may have weighted the record differently were not coded and, therefore, not available to HCFA in the diagnostic category classification.

7. A very real issue which specifically relates to mortality as calculated by the HCFA methodology is the critical shortage of nursing home beds specific to Union County, Sotuh Carolina. Because the two (2) facilities in this county offering skilled nursing care stay at a ninety-nine (99%) percent plus occupancy, the hospital is constantly saddled with the care of skilled nursing home patients awaiting nursing home placement. Because of the absence of skilled nursing bed support, it is highly likely that patients who normally would have died in a nursing home setting, expire as inpatients in the hospital. Because of the methodology used in this analysis by HCFA, (examining a thirty (30) day post-discharge window), the hospital is penalized because of the absence of skilled nursing beds. I would predict that this is a factor that will skew the mortality results in virtually every rural or isolated hospital.

Thank you for giving Wallace Thomson Hospital the opportunity to respond to this mortality analysis. I would welcome your comments on the information which I have conveyed.

Sincerely,

Larry H. Chewning
Chief Executive Officer

LHC:pmb

STATE OF SOUTH CAROLINA
DEPARTMENT OF MENTAL RETARDATION

PIEDMONT REGION
WHITTEN CENTER
P. O. DRAWER 239
CLINTON, SOUTH CAROLINA 29325

Telephone 803/833-2733

CHARLES H. CHADWELL, PH.D.
SUPERINTENDENT,
PIEDMONT REGION

CHARLES D. BARNETT, PH.D.
STATE COMMISSIONER

September 29, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, MA 21207

Re: Mortality Information - Short Term Acute Care Hospitals which treated Medicare Patients 1986

Attached - no comments.

George Dellaportas, M.D.
Health Programs Administrator
Whitten Center Hospital - Medicare Provider Number 42-0035

syj
attachment

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

	DIAGNOSIS	ICD-9-CM CODES*
High Risk		
CA	Cancer	141-160, 162-172, 174-209
CE	Stroke	430-432, 434, 436
HS	Severe acute heart disease	410, 427.1, 427.4, 427.5, 441.0, 441.1, 441.3, 441.5, 441.9, 785.51
HM	Severe chronic heart disease	398.91, 402.01, 402.11, 402.91, 425, 428, 518.4
GC	Gastrointestinal catastrophes	551, 557, 560.0, 560.2-560.9, 570, 572-572.7, 573.4, 567, 578.0, 578.9
ME	Metabolic and electrolyte disorders	250.01-250.4, 251.0, 251.1, 255.4, 276
PN	Pulmonary disease	415.1, 416.0, 480-483, 485-516, 518-519, except 516.1, and 518.4
RN	Renal disease	580-590 except 580.81 and 590.81
SE	Sepsis	DRG: 416, 417
TR	Severe trauma	806, 808.43, 808.53, 820, 821, 828, 850.2, 850.4, 851.1-851.7, 852, 839.0-839.5, 860-867, 887, 897, 900.0, 901-904, 926, 927.0, 928.0, 929.0, 942.3, 942.4, 942.5, 946.3-946.9, 947.1-947.9, 948.2-948.9, 952, 958.0, 958.1, 958.4, 958.5
Low Risk		
EY	Ophthalmologic disease	360-379
GY	Gynecologic disease	617-629
HL	Low risk heart disease	393-429, except 415.1 and 416.0 and cases in categories HS and HM
GI	Gastrointestinal disease	530-579, except 577.0, 573.1 and 573.2 and cases in category GC
GU	Urologic disease	593-609
OP	Orthopedic conditions	712-739, 810-838, 840-848 (excluding cases in category TR)
UN	All other Conditions	All other ICD 9 CM Codes

*All of the above entries refer to ICD-9-CM codes except for the entries for Sepsis which are expressed in terms of Diagnosis Related Groups (DRGs).

South Dakota

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
BAPTIST HDSP WINNER SD 5758D	SD-7 *	292	13	8-17	7	57	13-75	7	71	10-72	11	27	6-55	21	19	9-45	9	22	12-68	1	100	1-97	28	39	9-40
BELLE FDURCHE HEALTH CARE BELLE FDURCHE SD 57717	SD-8 *	222	13	7-18	9	44	5-59	7	29	8-68	14	7	4-45	17	41	8-47	4	75	14-90	3	67	2-82	19	5	9-47
BENNETT CO COMM HOSP MARTIN SD 57551	SD-9 *	70	13	9-28	1	100	3-99	5	0	7-76	2	0	0-91	5	20	2-68	6	17	12-78	.	.		15	20	6-47
BOWDLE HOSP BOWDLE SD 57428	SD-10 *	62	16	9-29	.	.		1	0	0-97	4	0	1-75	3	0	2-81	3	33	8-89	1	0	0-97	9	44	11-66
BROOKINGS HOSPITAL BROOKINGS SD 57006	SD-11 *	525	12	10-18	28	32	13-47	17	18	12-54	19	21	6-43	35	20	13-41	25	36	22-60	12	8	3-47	62	18	12-34
CANTON-INWOOD MEM HOSP CANTON SD 57013	SD-12 *	144	15	11-24	1	100	2-98	3	33	5-86	6	33	2-64	5	60	3-69	14	50	24-73	1	0	0-97	25	12	11-44
COMM MEM HOSP BURKE SD 57523	SD-13 *	116	14	7-21	3	100	9-90	11	18	8-57	3	33	0-82	8	38	8-65	3	0	6-87	1	100	0-99	21	14	8-43
COMMUNITY MEMORIAL HDSP STURGIS SD 57785	SD-14	316	7	8-17	9	11	6-60	9	11	7-61	5	40	5-74	25	8	11-45	13	38	17-66	3	0	0-83	39	13	12-39
COMMUNITY MEMDRIAL HDSPITA REDFIELD SD 57469	SD-15 *	252	13	9-19	11	45	8-58	17	29	13-54	12	8	3-46	7	29	5-63	9	56	18-75	1	0	0-98	47	4	10-34
COMMUNITY MEMORIAL HDSPITA WAGNER SD 57380	SD-16 *	240	11	8-19	6	50	12-78	6	0	7-71	4	25	3-77	12	8	6-51	10	30	13-68	3	0	3-83	31	23	9-38
COTEAU DES PRAIRIES HOSP SISSETDN SD 57262	SD-17 *	203	17	9-2D	7	43	4-62	6	50	8-73	7	0	2-60	16	38	8-49	12	83	18-70	3	0	0-84	27	15	8-40
CUSTER COMMUNITY HOSP CUSTER SD 5773D	SD-18 *	104	14	8-23	.	.		3	0	3-83	3	33	1-81	3	0	2-81	7	29	12-75	6	33	1-63	30	23	9-38
DAKDTA HOSPITAL VERMILLION SD 57069	SD-19 *	229	7	8-19	7	14	11-74	7	29	8-69	6	33	3-65	10	10	5-54	3	33	10-91	6	17	3-66	44	7	8-32
DAKOTA MIDLAND HOSPITAL ABERDEEN SD 57401	SD-20	721	6	7-14	48	27	16-44	26	19	15-49	5	20	3-70	37	19	12-39	13	31	17-67	10	0	3-52	60	13	10-31
DELL RAPIDS COMM HOSP DELL RAPIDS SD 57022	SD-21 *	251	15	10-21	18	44	12-54	14	14	10-55	5	40	5-73	13	23	8-53	11	27	17-70	9	33	3-55	21	29	10-47
DESMET MEMDRIAL HDSPITAL DESMET SD 57231	SD-22	137	16	9-23	4	50	4-78	9	56	8-62	.	.		10	20	6-56	5	40	11-81	4	25	1-74	32	9	9-37
DEUEL CO MEM HDSP CLEAR LAKE SD 57226	SD-23 *	91	15	7-23	2	100	2-90	5	40	5-73	2	0	3-91	3	0	1-81	3	33	5-86	.	.		14	21	7-50
OOUGLAS CO MEM HDSP ARMOUR SD 57313	SD-24 *	64	19	7-26	2	0	3-91	3	67	6-86	2	0	0-90	2	10D	1-89	1	100	1-97	2	50	0-91	12	8	8-55
ESTELLINE COMMUNITY HOSPIT ESTELLINE SD 57234	SD-25 *	73	11	7-24	2	50	7-95	3	0	5-86	5	20	1-68	4	25	4-77	4	75	10-86	1	0	0-99	9	22	4-56
EUREKA COMM HDSP EUREKA SD 57437	SD-26 *	172	8	8-20	4	50	8-83	4	25	6-80	2	0	0-90	14	29	8-52	3	0	4-84	1	0	0-97	32	9	10-39
FAULK CO MEM HDSP FAULKTON SD 57438	SD-27 *	105	8	10-25	1	1DD	3-99	6	0	9-75	4	0	2-74	1	0	0-97	6	17	11-77	.	.		24	13	12-48
FIVE COUNTIES HOSPITAL LEMMDN SD 57638	SD-28 *	71	10	7-24	6	5D	7-71	2	5D	1-89	.	.		3	0	1-81	.	.		7	0	2-59	13	15	6-50
FLANDREAU MUNICIPAL HOSP FLANDREAU SD 57D28	SD-29 *	119	13	7-21	6	83	8-73	3	D	3-83	2	100	3-91	4	50	5-78	.	.		5	0	2-69	27	11	8-39
FREEMAN COMMUNITY HOSPITAL FREEMAN SD 57D29	SD-30 *	186	13	9-20	1	0	0-99	14	14	11-56	4	0	1-74	10	20	7-58	8	38	11-71	4	D	1-74	33	15	7-35
GETTYSBURG MEMDRIAL HOSPIT GETTYSBURG SD 57442	SD-31 *	121	12	13-29	2	100	9-97	6	17	1D-75	2	50	D-90	8	13	8-65	4	25	9-84	2	0	2-90	34	9	12-41
GREGORY COMMUNITY HDSPITAL GREGDRY SD 57533	SD-32 *	230	8	8-19	7	57	13-76	5	0	5-73	4	0	1-74	14	14	11-56	5	60	11-81	2	50	0-91	35	9	10-38

*Written Comments Not Submitted

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
BAPTIST HDSP WINNER SD 57580	3	67	8-89	2	50	4-93	8	13	1-54	3	0	0-100	47	0	1-16	8	0	0-57	1	0	0-100	22	9	1-27	17	6	0-43
BELLE FOURCHE HEALTH CARE BELLE FOURCHE SD 57717	2	50	1-90	3	33	9-91	6	17	2-63	.	.		20	0	0-31	14	0	0-47	4	0	0-100	11	0	0-50	9	0	0-87
BENNETT CO COMM HOSP MARTIN SD 57551	3	33	3-84	.	.		.	.		.	.		5	40	0-77	1	0	0-99	.	.		8	0	0-55	2	0	0-100
BDWDLE HDSP BDWDLE SD 57428	2	50	8-97	1	0	2-98	.	.		.	.		5	20	0-73	3	0	2-81	.	.		7	0	0-60	6	0	0-97
BROOKINGS HDSPITAL BROOKINGS SD 57006	4	50	4-79	2	0	3-91	19	5	3-36	2	0	0-100	76	4	3-15	21	10	1-29	5	0	0-99	29	7	1-23	24	4	0-27
CANTON-INWOOD MEM HDSP CANTON SD 57013	.	.		3	33	5-86	1	0	0-99	.	.		21	5	2-30	1	0	0-100	1	0	0-100	16	6	1-34	8	0	0-77
COMM MEM HOSP BURKE SD 57523	1	0	0-99	.	.		.	.		.	.		10	0	0-57	3	0	0-85	.	.		7	14	0-71	11	9	0-74
COMMUNITY MEMDRIAL HDSP STURGIS SD 57785	.	.		.	.		9	0	3-53	.	.		47	0	2-18	17	6	0-34	3	0	0-100	32	6	1-20	23	0	0-31
COMMUNITY MEMORIAL HDSPITA REDFIELD SD 57469	4	25	2-77	1	0	1-97	1	0	0-99	.	.		39	8	2-20	6	17	0-64	1	0	0-100	13	0	0-39	15	7	0-41
COMMUNITY MEMORIAL HDSPITA WAGNER SD 57380	.	.		1	0	1-97	4	0	0-76	.	.		31	10	3-26	7	0	0-58	4	0	0-100	27	0	1-22	13	0	0-39
COTEAU DES PRAIRIES HDSP SISSETDN SD 57262	2	50	2-91	1	0	1-97	3	33	0-90	.	.		15	13	0-36	12	8	2-43	2	0	0-100	23	4	1-26	7	0	0-67
CUSTER COMMUNITY HDSP CUSTER SD 57730	4	25	6-82	.	.		2	0	0-95	.	.		13	0	0-40	2	0	0-99	.	.		5	0	0-92	5	0	0-96
DAKDTA HOSPITAL VERMILLIDN SD 57069	6	17	4-69	.	.		2	0	2-89	.	.		23	9	1-27	17	0	1-34	.	.		13	0	1-39	12	0	0-65
DAKOTA MIDLAND HDSPITAL ABERDEEN SD 57401	.	.		2	0	6-94	11	0	1-45	74	0	0-15	82	1	2-13	36	0	1-21	8	0	0-100	52	2	1-16	31	0	0-23
DELL RAPIDS COMM HOSP DELL RAPIDS SD 57022	4	25	3-78	2	0	4-93	2	0	0-97	.	.		28	0	2-25	10	10	2-49	3	0	0-100	18	6	1-31	14	0	0-68
DESMET MEMDRIAL HDSPITAL DESMET SD 57231	4	50	4-79	.	.		6	0	0-64	.	.		18	6	1-31	8	0	2-54	.	.		3	33	0-93	6	17	0-82
DEUEL CO MEM HDSP CLEAR LAKE SD 57226	1	100	2-100	.	.		.	.		.	.		12	17	1-41	9	22	0-51	.	.		5	0	0-78	6	0	1-62
DOUGLAS CO MEM HDSP ARMDUR SD 57313	2	100	6-95	.	.		.	.		.	.		6	17	0-75	2	0	0-100	.	.		4	0	0-87	3	0	0-100
ESTELLINE COMMUNITY HDSPIT ESTELLINE SD 57234	1	0	0-99	.	.		.	.		.	.		4	0	0-93	4	0	0-90	.	.		9	0	0-51	4	0	0-100
EUREKA COMM HOSP EUREKA SD 57437	3	0	4-86	.	.		1	0	0-100	.	.		20	5	1-30	10	0	1-47	1	0	0-100	11	0	0-47	10	0	0-61
FAULK CO MEM HDSP FAULKTON SD 57438	.	.		3	33	5-86	.	.		.	.		12	0	0-43	5	0	0-75	.	.		4	0	0-80	2	0	0-100
FIVE COUNTIES HDSPITAL LEMMDN SD 57638	3	0	1-83	.	.		4	25	1-74	.	.		5	0	0-78	2	0	0-90	.	.		2	0	0-98	2	0	0-100
FLANDREAU MUNICIPAL HDSP FLANDREAU SD 57028	1	100	1-98	.	.		4	25	0-74	.	.		7	0	0-64	7	0	0-64	.	.		3	0	0-92	9	0	0-56
FREEMAN COMMUNITY HOSPITAL FREEMAN SD 57029	9	22	9-67	1	0	0-97	1	100	0-99	.	.		19	0	1-30	13	31	1-40	.	.		6	0	0-68	7	0	0-83
GETTYSBURG MEMDRIAL HDSPIT GETTYSBURG SD 57442	1	100	0-97	3	33	5-85	1	0	0-100	.	.		11	0	2-45	3	0	1-81	1	0	0-100	9	0	0-52	10	10	1-46
GREGORY COMMUNITY HOSPITAL GREGORY SD 57533	1	0	0-98	2	0	3-91	6	33	2-63	.	.		42	5	1-18	8	0	0-54	.	.		10	0	0-50	14	0	0-44

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAND COUNTY MEM HDSP MILLER SD 57362	SD-33 *	213	15	9-20	7	71	12-75	13	54	8-54	5	0	1-68	13	31	7-51	12	42	16-67	3	0	2-82	46	11	10-35
HANS P PETERSDN MEM HDSP PHILIP SD 57567	SD-34 *	71	11	7-24	3	33	11-92	2	50	2-90	2	0	0-91	5	20	2-69	2	50	5-94	3	0	0-83	13	23	7-51
HDLY INFANT HDSP HDVEN SD 57450	SD-35 *	47	2	6-27	1	0	0-99	2	0	1-89	1	0	0-97	5	0	2-69	.	.		.	.		9	0	6-58
HURDN REGIDNAL MEDICAL CTR HURDN SD 57350	SD-36	776	10	10-17	79	14	15-37	33	24	16-46	20	10	5-40	29	21	12-44	38	42	28-59	13	0	4-48	72	17	11-31
IPSWICH COMMUNITY HDSP IPSWICH SD 57451	SD-37 *	111	20	12-28	12	33	14-65	10	40	9-62	4	25	1-75	5	20	3-70	12	25	16-67	.	.		18	44	10-50
KINGSBURY COUNTY MEMDRIAL LAKE PRESTDN SD 57249	SD-38 *	159	15	10-22	6	50	6-71	6	67	7-71	1	0	1-97	7	29	5-64	5	40	9-79	9	22	4-57	33	21	14-45
LAKE AREA HDSPITAL WEBSTER SD 57274	SD-39 *	254	14	12-23	7	57	15-78	10	40	12-66	7	29	3-61	18	22	12-52	12	50	24-75	5	20	10-80	38	18	15-44
LANOMANN-JUNGMAN MEMDRIAL SCOTLAND SD 57059	SD-40 *	192	9	7-18	6	17	6-71	6	33	7-72	3	0	0-84	10	40	7-57	4	25	7-82	3	0	1-81	23	22	10-44
LOOKDUT MEMDRIAL HDSPITAL SPEARFISH SD 57783	SD-41 *	361	13	8-17	18	33	9-49	6	33	9-74	9	56	11-67	13	31	5-49	17	47	18-62	5	40	5-73	35	14	10-38
MADISDN COMMUNITY HDSPITAL MADISDN SD 57042	SD-42 *	401	10	9-18	24	21	16-53	11	18	11-62	7	14	2-59	17	24	8-48	16	31	23-69	8	0	1-56	59	20	12-34
MARSHALL CO MEM HDSP BRITTDN SD 57430	SD-43 *	166	11	10-22	2	0	4-92	5	60	9-79	2	0	1-89	14	29	10-54	5	40	12-83	2	0	0-95	37	19	13-41
MCKENNAN HDSP SIDUX FALLS SD 57101	SD-44 *	2502	10	8-14	234	25	21-37	59	32	19-43	27	19	6-37	77	30	15-35	44	50	27-57	41	12	6-33	194	14	14-28
MEMDRIAL MEDICAL CENTER WATERTDWN SD 57201	SD-45 *	189	20	9-20	15	20	9-53	11	45	12-63	4	50	0-76	6	50	5-69	11	55	14-66	7	29	2-60	31	29	7-35
METHDDIST HDSPITAL MITCHELL SD 57301	SD-46	556	9	7-15	39	23	12-40	18	22	12-53	11	9	4-50	22	18	9-43	18	50	18-60	7	29	2-60	60	18	11-33
MID-DAKDTA HDSPITAL CHAMBERLAIN SD 57325	SD-47 *	228	12	10-22	12	50	11-61	8	63	12-71	6	0	4-66	8	13	8-66	10	50	17-72	4	0	0-78	35	14	14-43
MDBRIDGE REGIDNAL HDSP MDBRIDGE SD 57601	SD-48 *	382	16	10-19	14	50	14-62	15	60	12-57	7	14	3-62	34	32	12-40	19	42	20-62	6	0	1-64	46	17	13-39
NDRTHERN HILLS GENERAL HDS DEADWOOD SD 57732	SD-49 *	233	12	6-16	16	38	8-50	9	67	8-62	3	0	0-82	9	11	5-57	13	38	15-63	1	0	0-99	24	21	7-40
PHS INDIAN HDSP EAGLE BUTTE SD 57625	SD-50 *	24	8	3-31	1	100	1-97	.	.		.	.		4	0	4-78	.	.		1	0	0-98	3	0	0-84
PHS INDIAN HDSP ROSEBUD SD 57570	SD-51 *	57	16	4-22	1	100	1-97	.	.		.	.		4	0	2-75		.		1	100	3-100	9	33	5-57
PHS INDIAN HDSP WAGNER SD 57380	SD-52 *	35	11	6-30	3	67	8-90	.	.		.	.		1	0	0-97	1	0	1-97	2	0	0-90	5	0	5-73
PHS INDIAN HDSPITAL PINE RIDGE SD 57770	SD-53 *	82	6	5-20	1	100	0-97	1	0	0-97	4	0	1-74	2	0	1-89		.		.	.		19	11	8-45
PHS INDIAN HDSPITAL RAPID CITY SD 57701	SD-54 *	74	5	5-21	.	.		2	0	1-89	.	.		4	0	3-76	2	100	4-92	2	0	0-93	8	13	5-60
PHS INDIAN HDSPITAL SISSETON SD 57262	SD-55 *	39	21	6-30	1	100	3-99	1	100	1-97	1	0	0-98	4	0	2-74	1	100	1-97	1	0	0-99	5	60	4-71
PIDNEER MEM HDSP VIBDRG SD 57070	SD-56 *	176	16	9-20	8	25	2-56	9	67	9-64	.	.		15	40	11-55	3	0	3-83	11	9	5-54	34	35	13-42
PLATTE COMM MEM HDSP PLATTE SD 57369	SD-57 *	73	15	7-25	3	0	2-81	5	20	4-71	1	0	0-97	4	25	5-78	4	0	8-83	.	.		9	44	7-60
PRAIRIE LAKES HDSP WATERTDWN SD 57201	SD-58	793	12	9-17	69	25	14-37	21	24	15-53	17	18	4-42	33	18	13-43	36	53	25-57	20	5	3-37	82	18	13-32

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAND COUNTY MEM HOSP MILLER SD 57362	1	0	0-97	1	100	2-98	3	0	0-91	.	.		27	4	1-23	5	20	0-75	4	0	0-100	6	17	0-76	12	0	0-64
HANS P PETERSON MEM HOSP PHILIP SO 57567	1	0	0-98	.	.		1	0	0-99	.	.		7	0	0-69	3	33	0-88	.	.		4	0	0-87	3	0	0-97
HDLY INFANT HDSP HDVEN SD 57450	.	.		1	100	3-100	.	.		.	.		11	0	0-47	2	0	0-98	.	.		.	.		2	0	0-100
HURON REGIONAL MEDICAL CTR HURON SO 57350	5	40	2-71	6	33	10-76	17	6	2-36	4	0	0-100	122	7	2-11	54	2	1-17	9	0	0-93	54	2	2-16	33	0	0-19
IPSWICH COMMUNITY HOSP IPSWICH SO 57451	1	0	0-97	.	.		1	0	0-98	.	.		16	0	0-35	.	.		.	.		4	0	0-80	5	0	0-93
KINGSBURY COUNTY MEMORIAL LAKE PRESTON SD 57249	2	50	1-90		.		4	25	1-74	1	0	0-100	26	4	1-24	2	0	0-100	1	0	0-100	13	0	1-39	4	0	0-87
LAKE AREA HOSPITAL WEBSTER SD 57274	2	100	4-93	1	0	1-97	2	0	0-92	.	.		33	0	1-21	11	18	2-47	2	0	0-100	28	0	2-25	12	0	0-51
LANDMANN-JUNGMAN MEMORIAL SCOTLAND SO 57059	2	0	1-90	.	.		7	14	1-58	.	.		23	0	1-27	7	14	1-57	2	0	0-100	17	6	1-32	17	0	0-46
LOOKOUT MEMORIAL HOSPITAL SPEARFISH SD 57783	7	29	4-65	.	.		16	6	2-37	1	0	0-100	51	6	1-16	14	0	0-38	1	0	0-100	27	11	1-23	33	0	0-21
MADISON COMMUNITY HOSPITAL MADISON SD 57042	2	0	1-90	4	50	8-83	14	0	0-39	4	0	0-100	41	5	2-20	18	0	0-40	3	0	0-100	22	9	1-26	34	0	0-22
MARSHALL CO MEM HOSP BRITTON SD 57430	2	0	1-90	1	100	3-100	.	.		.	.		24	0	1-26	6	0	1-62	.	.		22	0	1-27	9	0	0-65
MCKENNAN HDSP SIOUX FALLS SD 57101	8	25	5-64	10	30	14-69	72	10	5-20	33	0	0-47	209	4	3-10	76	0	1-14	23	0	0-81	93	9	2-12	389	1	1-4
MEMORIAL MEDICAL CENTER WATERTOWN SD 57201	2	50	1-90	.	.		3	0	0-88	.	.		21	5	1-28	11	0	0-51	1	0	0-100	11	36	1-43	10	0	0-73
METHODIST HOSPITAL MITCHELL SD 57301	7	14	4-66	2	0	3-91	13	8	1-40	11	0	0-99	72	1	1-13	35	3	1-21	3	0	0-100	33	0	1-20	45	2	0-15
MID-DAKOTA HOSPITAL CHAMBERLAIN SD 57325	5	20	4-74	1	100	1-97	1	0	0-100	.	.		18	6	2-33	4	0	1-74	.	.		10	0	0-47	13	0	0-64
MOBRIDGE REGIONAL HOSP MOBRIDGE SO 57601	3	33	3-84	3	67	11-93	8	13	1-53	2	0	0-100	62	3	2-16	4	0	0-85	5	0	0-100	31	10	2-23	13	0	0-63
NORTHERN HILLS GENERAL HOS DEADWOOD SD 57732	2	0	1-90	.	.		5	0	0-75	.	.		30	3	1-22	15	7	0-45	1	0	0-100	23	0	0-26	23	0	0-40
PHS INDIAN HOSP EAGLE BUTTE SD 57625	.	.		.	.		.	.		.	.		3	0	0-97	.	.		.	.		1	0	0-99	1	0	0-100
PHS INDIAN HOSP ROSEBUD SO 57570	.	.		.	.		.	.		.	.		6	17	0-78	1	0	0-100	.	.		8	0	0-60	2	0	0-100
PHS INDIAN HOSP WAGNER SD 57380	2	100	2-90	.	.		.	.		.	.		4	0	0-90	.	.		.	.		2	0	0-97	2	0	0-100
PHS INDIAN HOSPITAL PINE RIDGE SD 57770	1	0	0-98	.	.		.	.		.	.		6	0	0-73	2	0	0-95	1	0	0-100	5	0	0-85	2	0	0-100
PHS INDIAN HOSPITAL RAPID CITY SD 57701	.	.		1	100	2-98	1	0	0-100	.	.		4	0	0-80	5	0	1-67	1	0	0-100	2	0	0-98	2	0	0-99
PHS INDIAN HOSPITAL SISSETON SD 57262	.	.		2	50	4-92	1	0	0-100	1	0	0-100	1	0	0-100	1	0	1-97	.	.		2	0	0-99	3	0	0-100
PIONEER MEM HOSP VIBORG SD 57070	1	0	0-99	.	.		2	0	0-95		.		14	0	0-40	14	7	1-38	.	.		11	0	0-49	4	0	0-98
PLATTE COMM MEM HOSP PLATTE SO 57369	2	50	0-90	1	0	1-97	.	.		.	.		4	0	0-87	.	.		.	.		7	0	0-63	6	0	0-96
PRAIRIE LAKES HOSP WATERTOWN SD 57201	8	38	12-74	4	25	9-84	20	0	1-30	3	0	0-100	73	4	3-15	58	2	1-16	13	8	0-98	45	4	1-17	59	0	0-12

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																							
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
RAPID CITY REGIONAL HDSPIT RAPID CITY SD 57701	SD-59 *	2635	10	7-14	246	24	16-32	64	27	17-40	36	14	10-38	68	21	15-36	105	36	29-50	14	36	5-49	203	16	14-27
SACRED HEART HOSPITAL YANKTON SD 57078	SD-60 *	1216	10	9-16	127	17	16-35	37	22	16-45	10	0	3-52	45	18	13-38	52	40	27-55	19	11	6-43	90	22	14-33
SIOUX VALLEY HOSPITAL SIOUX FALLS SD 57101	SD-61	4373	8	7-14	409	20	20-35	93	19	18-38	38	26	12-41	120	28	17-34	144	40	28-46	57	18	11-36	236	17	16-29
SOUTHERN HILLS GENERAL HOS HOT SPRINGS SD 57747	SD-62 *	208	10	8-19	16	38	15-59	3	0	3-83	2	0	0-90	11	18	8-58	16	38	21-67	4	25	0-76	28	4	8-39
ST BENEDICT HOSP PARKSTON SD 57366	SD-63 *	134	26	10-24	9	22	13-70	12	58	12-62	2	50	0-90	21	38	9-45	4	75	9-84	2	0	1-89	16	13	6-46
ST BERNARDS PROVIDENCE HOS MILBANK SD 57252	SD-64	218	12	9-19	16	38	9-51	7	14	5-63	3	33	1-82	13	15	5-49	12	42	16-67	4	25	1-74	34	12	11-3^
ST JOSEPHS HOSP MITCHELL SD 57301	SD-65 *	802	10	9-16	48	25	17-44	22	27	14-51	20	10	5-40	37	30	13-41	25	36	22-60	25	4	6-40	64	13	12-33
ST LUKES HOSP ABERDEEN SD 57401	SD-66	1456	8	8-15	116	22	18-38	37	30	16-45	43	9	7-32	58	17	13-36	44	36	23-52	32	9	5-34	118	14	15-32
ST MARYS HOSP PIERRE SD 57501	SD-67 *	658	11	9-16	53	36	15-41	25	40	15-50	17	12	5-43	47	23	14-40	14	57	22-70	4	0	1-74	58	14	11-32
ST MICHAELS HOSPITAL TYNDALL SD 57066	SD-68 *	168	14	6-17	2	50	1-89	9	56	10-66	2	50	0-91	5	0	4-71	8	63	12-71	3	0	2-82	18	39	9-48
WESKOTA MEMORIAL MED CTR WESSINGTON SPRINGS SD 57382	SD-69 *	150	11	8-21	2	50	3-91	9	44	9-63	5	0	2-69	8	0	10-68	4	50	9-84	4	0	1-74	25	20	9-42

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
RAPID CITY REGIONAL HOSPIT RAPID CITY SD 57701	18	11	9-54	9	44	13-70	82	13	4-18	163	1	0-5	270	5	2-9	168	1	1-10	32	3	0-24	136	7	2-10	248	2	0-5
SACRED HEART HOSPITAL YANKTON SD 57078	10	30	6-60	18	11	19-64	59	10	3-19	23	0	0-39	159	3	3-11	108	1	1-12	20	0	0-68	74	8	2-14	82	1	0-9
SIDUX VALLEY HDSPITAL SIDUX FALLS SD 57101	27	26	9-47	4	50	6-81	132	14	5-17	264	0	0-3	329	4	3-9	170	2	2-11	48	0	0-33	508	5	3-7	630	1	1-3
SOUTHERN HILLS GENERAL HDS HOT SPRINGS SD 57747	.	.		1	100	1-98	1	0	0-100	6	0	0-100	27	0	0-23	16	0	0-38	2	0	0-100	20	10	0-28	4	0	0-99
ST BENEDICT HOSP PARKSTON SD 57366	1	100	0-97	.	.		.	.		.	.		21	24	2-30	2	0	0-93	2	50	0-100	15	20	1-35	1	0	0-100
ST BERNARDS PROVIDENCE HOS MILBANK SD 57252	.	.		.	.		10	20	2-48	.	.		38	11	1-19	2	0	0-100	2	0	0-100	12	0	0-42	10	0	0-75
ST JOSEPHS HOSP MITCHELL SD 57301	8	25	6-65	2	0	3-91	26	4	2-28	7	0	0-100	91	5	3-14	53	2	2-18	13	0	0-99	73	3	2-14	44	0	0-16
ST LUKES HOSP ABERDEEN SD 57401	8	13	7-67	8	0	19-80	46	7	3-22	9	0	0-99	171	3	2-10	120	3	1-12	32	0	0-54	90	3	2-13	125	2	0-7
ST MARYS HOSP PIERRE SD 57501	8	50	12-74	3	67	6-87	22	14	3-32	2	0	0-100	75	3	1-13	33	9	1-22	7	0	0-100	27	0	1-23	75	0	0-10
ST MICHAELS HOSPITAL TYNDALL SD 57066	.	.		.	.		3	0	0-89	1	0	0-100	26	0	1-24	9	0	0-65	1	0	0-100	13	0	0-39	20	0	0-43
WESKOTA MEMORIAL MED CTR WESSINGTON SPRINGS SD 57382	1	100	0-100	2	50	3-91	2	0	0-96	.	.		11	0	1-44	6	0	0-77	.	.		11	0	0-44	9	0	0-53

*Written Comments Not Submitted.

COMMUNITY MEMORIAL HOSPITAL ASSOCIATION
2100 DAVENPORT STREET STURGIS, SOUTH DAKOTA 57785
PHONE (605) 347-2536

October 14, 1987

Bill Roper, M.D., Administrator
Department of Health & Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

I am writing to you in regards to the mortality information which was sent to our hospital in September of 1987. In reviewing the information regarding dates of death, which would be for Hospital #430028, we have found two errors:

[redacted] showing a date of death of 1-31-86, should read 1-24-86;

[redacted] showing a date of death of 6-30-86, should read 6-19-86.

Thank you.

Sincerely,

Michael Penticoff
Administrator

MP:jra

DAKOTA MIDLAND HOSPITAL

DIVISION OF HEALTHONE

HIGHWAY 281 NORTH AND FIFTEENTH AVENUE NORTHWEST • ABERDEEN, SOUTH DAKOTA 57401 • (605) 622-3300

October 29, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, D.C. 20201

Dear Dr. Roper:

The data used by HCFA indicate that a total of 46 Medicare patient admitted to Dakota Midland Hospital, Aberdeen, South Dakota, died within 30 days of admission. Of these, 32 died while still a patient of the hospital, while 14 died after discharge. Our own records indicate that 1,152 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Dakota Midland Hospital is correct. It is impossible to determine the percentage of the 14 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

In reviewing the tact taken by HCFA in compiling this data, it is important to note that this data cannot be perceived to be drawing any realistic conclusions regarding the quality of care provided in a hospital. I appreciate the efforts of HCFA to pull together quantitative data, but do not feel that this particular study does so.

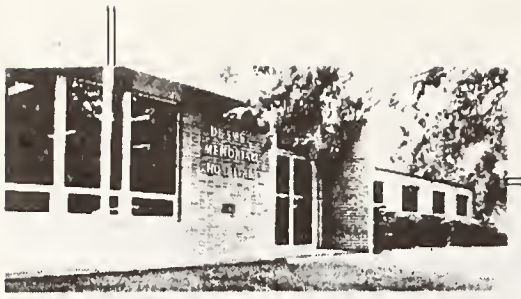
Dakota Midland Hospital falls well within the ranges and our statistics do not show any particular problems, I feel that a good deal of education needs to be done to the public to help them to understand the HCFA data.

I appreciate the opportunity to have comment into this process.

Sincerely,

Anne Renz
Senior Executive Officer

AR:pas



DE SMET MEMORIAL HOSPITAL

(605) 854-3329 306 PRAIRIE AVENUE S.W. DE SMET, SOUTH DAKOTA 57231

October 12, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir,

The following are our comments regarding your 21 September 1987 letter and 1986 mortality data. A copy of our hospital's report is attached for your reference.

COMMENTS: Provider No. 430024

1. First, two general comments:

(a) Perhaps, from our vantage point as a very small rural hospital, we are unable to see the big picture, but we have serious questions about whether HCFA's intended purposes justify spending tens of thousands of dollars of the tax payers money to go through an exercise of questionable value.

(b) Although hospitals are not required to make comments, we at least must make the time & effort to review and evaluate the data and review the background of some or all of the cases listed. Then, prepare comments if warranted. The point is that this exercise is just another example of the administrative burden placed on hospitals with no way to recover the associated costs. At least we have to assume the Medicare DRG rates are not being raised to compensate for our time and effort.

2. Re the Mortality Rate Chart:

(a) The "All Causes" line shows 137 cases, yet the number of cases by "Diagnostic Category" only add up to 109 cases. What accounts for the difference?

(b) Although the accompanying patient ID list shows two cases with the Diagnostic Category "UN" the mortality rate chart does not indicate what "UN" means or apparently does not include those two cases. One of those cases was transferred to and died at a large referral hospital. Do both hospitals get charged with that death?

(c) Thus, the basic statistics may be in doubt.

3. Re the Patient ID Chart:

(a) At least one death (a terminal CA case) is not listed.

(b) The one case listed as "OP" (Orthopedic Disorders) is very misleading. Although the specific admission was orthopedic, the cause of death was terminal "carcinomatosis from breast CA". This case raises doubts as to the validity of a report which can make it appear that a patient who was killed in a car accident 29 days after discharge died as a result of hospitalization treatment of a broken arm. We don't think that kind of perception is fair either to the hospital or to the public. And further, it is unfair that we must then expend the time & effort to research the records and write the comments in an attempt to set the record straight.

4. Although it may seem obvious, we would draw your attention to the "Age" column.

(a) All the cases were over 60 years of age.

(b) 86% were over 70 years of age.

(c) 77% were over 80 years of age.

(d) 23% were over 90 years of age.

(e) The 3 cases between 60-69 were either terminal cancer or terminal cirhosis.

(f) The point being that, when one couples the high age range, the principal diagnosis of the particular admissions, and related secondary diagnosis or complications, the statistical probability of death can be very high.

(g) For the record, we must also point out that, in spite of the high age range and of the seriousness of the diagnostic categories involved, every category is well within the range of predicted mortality rates.

Thank you.

Dennis J. Muser
Administrator

HOSPITAL = 430024 DESMET MEMORIAL HOSPITAL DESMET SD

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	137	16 %	9 TO 23 %
CA - CANCER	4	50 %	4 TO 78 %
CE - CEREBROVASCULAR ACCIDENTS	9	56 %	8 TO 62 %
GI - GASTROINTESTINAL DISEASE	18	6 %	1 TO 31 %
GU - UROLOGIC DISEASE	8	0 %	2 TO 54 %
HL - LOW-RISK HEART DISEASE	3	33 %	0 TO 93 %
HM - SEVERE CHRONIC HEART DISEASE	10	20 %	6 TO 56 %
HS - SEVERE ACUTE HEART DISEASE	5	40 %	11 TO 81 %
ME - METABOLIC/ELECTROLYTE DISTURBANCES	4	25 %	1 TO 74 %
OP - ORTHOPEDIC DISORDERS	6	17 %	0 TO 82 %
PN - PULMONARY DISEASE	32	9 %	9 TO 37 %
RN - RENAL DISEASE	4	50 %	4 TO 79 %
TR - SEVERE TRAUMA	6	0 %	0 TO 64 %

UN- ?

Huron
Regional
Medical
Center
4th & Iowa S.E. - 605 352 6431
Huron, South Dakota 57350

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

The attached is the response of Huron Regional Medical Center to the selected mortality information to be released by the Health Care Financing Administration in December, 1987. We assume these comments will be published with the information released at that time.

Sincerely,

Richard C. Sommer
Administrator

RCS/sm

Enc.

Huron
Regional
Medical
Center
4th & Iowa S.E. - 605 352 6431
Huron, South Dakota 57350

RESPONSE BY HURON REGIONAL MEDICAL CENTER
TO HCFA SELECTED MORTALITY DATA

MEDICARE PROVIDER NO. 430011
October 27, 1987

Huron Regional Medical Center supports the efforts of the Department of Health and Human Services and the Health Care Financing Administration to focus public attention on the issue of quality in hospitals. The publication of selected mortality data for all short term acute care hospitals, however, provides a rather limited view and great care should be taken in forming opinions about the quality of any hospital based soley upon this data.

Quality of care and the monitoring of factors which are indicators of quality to include mortality data is an ongoing effort at Huron Regional Medical Center on the part of the medical staff, hospital personnel, administration and the Board of Directors. Organized committees of the medical staff and hospital departments meet monthly to review both general data regarding the operation of the hospital and specific data regarding the course of treatment of our patients.

Results of this ongoing monitoring provide important information to the hospital and medical staff which is used to evaluate the effectiveness of procedure and technique and to reveal areas where further study and attention should be focused. Since the process is an ongoing one, a problem that is discovered can be addressed quickly.

In considering the data presented in this report, it is important to remember that the Huron Regional Medical Center is a referral center. The specialists on our medical staff are frequently called upon to care for patients whose medical conditions are acute. In a number of instances, the patient's general health status and the stage of their disease are such that death is the expected outcome of their admission to the hospital. The data in this report do not consider these important factors.

Our physicians and hospital staff work closely with the family and friends of each patient to insure that they are aware of the patients condition and the potential outcome of treatment. One program offered at Huron Regional Medical Center specifically designed for patient's whose treatment course is pallative, is our Hospice program. Patients with terminal conditions receive special attention, as do family and friends. Understanding of the patient's disease process and patient comfort are the priorities of this program. Of course, the existance of such a program tends to increase the actual mortality rate for the hospital.

The data contained in this report raise important questions; however, data alone do not provide all the answers. The Huron Regional Medical Center is committed to the ongoing review of all aspects of patient care. Our patients can be assured that this effort will provide them with high quality, reliable health care now and in the future. Questions dealing with this report or specific hospital services should be directed to the Administrator, Huron Regional Medical Center, 172 Fourth Street SE, Huron, SD 57350.

Methodist Hospital

909 South Miller Avenue Mitchell, South Dakota 57301-4199 Phone 605-996-5627

Hospital - 430017 COMMENTS ON THE HCFA MORTALITY DATA

Data Verification

The data used by HCFA indicate that a total of 556 Medicare patients were admitted to Methodist Hospital. HCFA data also indicate that a total of 52 Medicare patients admitted to Methodist Hospital died within 30 days of admission. Of these, 41 died while still a patient of the hospital, while 11 died after discharge. Our own records indicate that 838 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to our hospital. Methodist Hospital records indicate that a total of 51 Medicare patients died within 30 days of admission. One (1) patient died after being admitted to a VA Hospital and should not be counted in our statistics. Our own records also indicate that of the 51 Medicare patients who died within 30 days of admission while still an inpatient, 9 were still alive at the time of discharge. It is impossible to determine the percentage of the 9 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Results of Prelimary Medicare Record Review

Our own review of the medical record data reveals of the 51 Medicare patients who died within 30 days of admission, 26 had DNR (Do Not Resuscitate) orders. In addition, 3 patients had chemical code only/no CPR/no agressive measures orders, for a total of 29 patients or 56.8%.

Our review also determined that of the 42 in hospital deaths, 9 deaths were expected upon admission due to terminal illnesses, and 30 had a significant possibility of death due to the nature of their illnesses. Of the 9 patients who died after discharge from Methodist Hospital, 4 were expected to expire due to terminal conditions. An additional 3 patients had a significant possibility of death after discharge due to the nature of their illnesses.

A review of category HS indicates 4 of the 9 patients who expired had DNR orders. An additional 2 patients were admitted in acute cardiac arrest.

Medical record review also indicates that 34 patients out of the 51 Medicare patients who died within 30 days of admission, or 66.6%, had complications and/or comorbid conditions considered by HCFA to be significant.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

Prairie Lakes Health Care Center

Located at
Prairie Lakes Hospital/West
400 10th Avenue Northwest
Watertown, South Dakota 57201-1599
605 886-8491

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Gentlemen:

The recent data provided by HCFA has prompted me to make an appropriate response. This organization views the data as an opportunity to coordinate this information with our Quality Risk Management program currently in place. I do not feel the data alone, as provided by HCFA, is an indicator of quality of care provided by this organization. On the other hand, I do feel it is a useful resource which our quality management department and medical staff can use to identify trends and areas that need further review. The quality of patient care is a concern to the board of directors, medical staff, and administration of this organization. For this reason, a committment has been made by instituting an on-going quality risk management program with appropriate review systems which allow for proper review of patient care services.

The data provided by HCFA indicates this organization falls into the range of predicted mortality rates. In the diagnostic category of severe acute heart disease, the predicted range of mortality rate is 25% to 57% and, according to the HCFA records, this organization had an actual mortality rate of 53%. After researching this particular category, it should be noted that our death log indicates there were 108 Medicare patients who had a diagnosis of severe acute heart disease. Of the 108 patients with that particular diagnosis, 48 cases expired which, according to our records, would be an actual mortality rate of 44% and not 53% as reported by HCFA. In addition, our records indicate that of the 48 patients who expired due to severe acute heart disease, 17 of the 48 patients were diagnosed as having contributing factors. Six patients had chronic heart failure, 2 patients had chronic obstructive pulmonary disease, 5 patients had cancer, 2 patients had diabetes, and 2 patients had cardiovascular accident. Also, the average age of the 48 patients who expired was 76 years. I felt it was appropriate that HCFA understand this organization's assessment of this particular category, and that we do not feel the actual mortality rate is excessive.

I would like to restate that the data provided by HCFA will be used to assist in the overall quality risk management program of monitoring the quality of care provided by this organization, and should not be viewed as being the only or most appropriate source of monitoring patient care.

Sincerely,

Edmond L. Weiland
Administrator

ELW; jg

SIOUX VALLEY HOSPITAL

1100 South Euclid Avenue
P.O. Box 5039
Sioux Falls, South Dakota 57117-5039
(605) 333-1000

October 5, 1987, 1987

WILLIAM ROPER MD
HEALTHCARE FINANCING ADMINISTRATION
HOSPITAL MORTALITY INFORMATION
P O BOX 26684
BALTIMORE MD 21207

Dear Dr. Roper:

This is in reply to your letter of September 21, 1987 (HCFA mortality data). I would like to make the following comments relative to Sioux Valley Hospital, Sioux Falls, SD data:

1) Patient surname [redacted]
This patient was not discharged on August 25 and did not expire on the August 25.

2) Patient surname [redacted]
This patient was not discharged and did not expire on January 16, 1986.

3) Patient surname [redacted]
This patient was not discharged and did not expire on March 7, 1986.

4) Patient surname [redacted]
This patient was not discharged and did not expire on July 16, 1968.

5) Patient surname [redacted]
This patient was not discharged and did not expire on March 8, 1986.

6) Patient surname [redacted]
This patient was not discharged and did not expire on May 20, 1986.

It is possible that these patients were at Sioux Valley Hospital; however this institution as well as most institutions, do not keep their data under HIC numbers and it is necessary to have more than 6 letters to find certain patients such as a Johnson, Anderson or Christensen.

There are other problems with your data in that there were 11 patients in which the date of death was incorrect as it pertained to our records.

In summary, I suggest that you supply a hospital number so the patient can be found in the hospital records. If that is not possible, we need to have the patient's entire name--last name, first name and middle initial so we may confirm the data.

Sincerely,

Jon Soderholm
Executive Vice President

sd

ST. BERNARD'S PROVIDENCE HOSPITAL
901 East Virgil Avenue
MILBANK, SOUTH DAKOTA 57252

October 1, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
PO Box 26684
Baltimore, Maryland 21207

Dear Sirs:

We would like to make a few comments regarding the mortality data.

I Because the DRG system requires us to list a patient's admitting diagnosis first in the submittal of record to all payors and in maintenance of records , the use of this diagnosis as the basis for the diagnostic category may shew the curve. Since we are a small rural hospital the total number of cases involved is very small yet in reviewing these cases with medical staff we would have reclassified 4 cases. If this same trend is reflected nationwide, I believe the data to be significantly misleading.

II My second comment relates to the release of information relating to date of discharge-date of death. In those cases where the patient dies within 30 days of discharge-the significant information is whether the patient was appropriately placed at the time of death and was the death related to the diagnosis at the time of admission. These issues are not addressed in the information released and therefore the data released may lead to ambiguity and ambivalence in the general public's interputation of such data. Care should be taken if this type of data is to be continued to be released to make the information clear, relevant, concise and understandable to the general population.

Thank you for the chance to comment.

Sincerely yours,

Sr. Margaret Mary Vogel DSMP

Sr. Margaret Mary Vogel
Administrator, St. Bernard's Hospital

Member of the
Presentation Health System

St. Luke's Hospital

(605) 229-3000
305 South State Street, Aberdeen, South Dakota 57401

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Mortality Information for St. Luke's Hospital
Medicare Provider Number 430014

Dear Dr. Roper:

In review of the enclosed mortality information provided to St. Luke's Hospital we have found that we can not identify one patient in the listing. The patient in question is located on page three of the report with a surname of [redacted] We find this curious as all the information relating to this patient is identical to the patient listed immediately above it [redacted] with the exception of the surname. We would appreciate your investigation of this possible error.

Sincerely,

Dale J. Stein
Executive Director

DJS/df
Encl.

Tennessee

Medicare Hospital Mortality Information

HOSPITALS Name/Location	Comment/Reference	Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
		Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ATHENS COMMUNITY HDSP-ATHENS TN 37303	TN-13 *	888	13	9-17	43	37	17-45	26	38	14-48	23	22	5-38	40	20	11-37	41	34	25-56	26	12	6-38	111	17	14-31
B'NAI B'RITH HOME & HOSP F MEMPHIS TN 38104	TN-14 *	16	13	5-43	.	.		2	50	2-90	.	.		1	0	0-97	.	.		1	0	0-98	3	0	4-84
BAPTIST HOSP NASHVILLE TN 37203	TN-15	4474	10	7-14	385	16	16-30	108	32	19-37	91	16	10-29	188	22	17-30	94	32	26-47	73	21	9-31	310	25	15-27
BAPTIST MEM HOSP HUNTINGDO HUNTINGDON TN 38344	TN-16	689	13	9-16	20	65	18-59	30	47	15-47	7	14	3-61	37	14	13-41	17	41	22-66	32	28	8-39	89	22	14-33
BAPTIST MEMORIAL HDSP MEMPHIS TN 38146	TN-17	10098	9	7-13	887	24	18-31	330	26	21-32	166	13	9-25	394	19	18-28	322	32	31-44	100	14	9-28	573	16	14-24
BAPTIST MEMORIAL HOSP LAUD RIPLEY TN 38063	TN-18	518	17	10-18	18	44	10-50	25	40	17-52	7	57	3-61	39	13	11-37	24	46	22-60	12	25	4-50	81	25	11-30
BAPTIST MEMORIAL HOSP TIPT COVINGTON TN 38019	TN-19	688	12	10-17	40	28	14-43	30	23	14-46	13	15	5-49	45	36	12-37	25	40	24-62	12	33	12-62	88	14	12-30
BAPTIST MEMORIAL HOSP UNIO UNION CITY TN 38261	TN-20	1182	14	8-15	84	36	17-39	50	14	15-40	17	6	4-42	61	34	12-34	51	57	25-52	44	27	8-34	97	25	10-27
BAPTIST MEMORIAL SPECIALTY MEMPHIS TN 38104	TN-21	23	0	0-63	.	.		.	.		.	.		.	.		.	.		.	.		.	.	
BEDFORD CO GENERAL HOSP SHELBYVILLE TN 37160	TN-22 *	641	15	9-17	36	47	16-47	28	36	15-48	8	63	3-57	61	28	13-35	16	44	20-65	10	10	6-57	80	16	11-30
BENTON COMMUNITY HOSP CAMDEN TN 38320	TN-23 *	709	12	9-17	24	42	18-56	39	31	18-47	20	10	2-35	30	27	11-41	29	38	26-62	13	23	4-47	136	15	11-26
BLEDSOE CO HOSP PIKEVILLE TN 37367	TN-24 *	250	9	8-18	5	40	9-79	10	40	11-64	2	0	0-90	11	9	7-56	7	43	12-75	1	100	2-98	30	7	9-39
BLOUNT MEMORIAL HOSP-MARYVILLE TN 37801	TN-25	2324	12	8-15	167	34	19-36	82	32	20-41	55	9	7-30	109	21	15-32	92	37	30-51	23	30	7-43	172	17	12-27
BOLIVAR COMMUNITY HOSP BOLIVAR TN 38008	TN-26 *	453	16	9-18	12	50	5-51	22	50	12-49	11	9	3-49	13	23	8-52	18	61	21-65	38	21	7-35	70	24	13-34
BRADLEY CO MEM HOSP CLEVELAND TN 37311	TN-27	1677	11	8-15	126	29	19-38	53	36	17-42	42	19	9-34	70	21	13-34	59	53	25-51	31	6	7-38	174	13	11-25
BRISTOL MEMORIAL HOSP-BRISTOL TN 37620	TN-28	3009	14	9-15	272	32	18-33	146	32	19-35	54	15	8-30	124	23	15-31	136	42	28-46	55	18	9-33	261	24	14-26
CARTHAGE GENERAL HOSP-CARTHAGE TN 37030	TN-29 *	233	9	7-18	7	71	6-66	8	38	10-68	2	0	1-89	11	0	7-56	5	60	15-86	2	50	3-91	40	10	8-34
CHAMBERLAIN MEMORIAL HOSP-ROCKWOOD TN 37854	TN-30 *	609	14	9-17	24	38	13-49	23	22	14-51	10	0	3-51	32	25	9-38	22	59	21-60	5	0	3-70	104	24	11-28
CITY OF MILAN HOSP MILAN TN 38358	TN-31 *	453	18	10-18	15	60	17-63	23	48	17-55	13	31	5-49	17	18	8-46	19	37	23-65	9	33	4-57	74	30	11-31
CLAIBORNE CO HOSP TAZEWELL TN 37879	TN-32 *	844	13	8-15	42	48	18-48	31	23	14-46	18	11	8-48	41	29	13-39	24	38	19-56	7	14	1-59	120	19	13-30
CLARKSVILLE MEMORIAL HOSP CLARKSVILLE TN 37040	TN-33	1641	13	8-15	117	32	14-32	75	25	19-41	25	12	5-37	83	22	14-33	41	46	25-56	20	25	6-43	166	25	14-29
CLAY CO HOSP CELINA TN 38551	TN-34 *	223	8	7-18	4	50	10-85	4	25	8-83	4	0	2-75	10	20	7-57	4	50	10-86	6	33	7-71	35	11	10-38
CLEVELAND COMMUNITY HDSP CLEVELAND TN 37311	TN-35 *	416	12	6-15	14	43	10-56	12	33	10-59	16	19	4-42	18	28	8-47	18	56	17-60	12	17	3-48	44	11	6-28
COCKE CO BAPTIST HOSP INC NEWPORT TN 37821	TN-36 *	603	13	8-16	15	67	9-52	21	29	12-49	5	20	3-71	34	12	11-40	35	31	23-55	11	9	3-50	85	28	12-30
COFFEE CO GENERAL HOSP-MANCHESTER TN 37355	TN-37 *	300	11	7-16	11	27	5-54	15	13	10-53	8	0	2-56	12	25	7-54	14	50	17-65	8	13	4-60	38	24	9-35
COOKVILLE GENERAL HOSP COOKEVILLE TN 38501	TN-38	1580	11	8-15	71	21	16-39	55	22	17-42	28	21	6-35	85	38	15-34	33	33	25-59	53	26	10-35	162	16	12-26

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
ATHENS COMMUNITY HOSP- ATHENS TN 37303	11	18	10-64	7	57	10-73	27	0	1-26	7	0	0-100	109	7	1-10	66	8	2-17	1	0	0-100	94	2	2-11	30	3	0-26
8'NAI 8'RITH HOME & HOSP F MEMPHIS TN 38104	.	.		.	.		.	.		1	0	0-100	.	.		1	0	0-100	.	.		3	33	0-90	.	.	
8APTIST HOSP NASHVILLE TN 37203	63	21	12-42	47	47	24-54	117	7	3-15	28	0	0-82	415	5	2-8	290	4	2-10	58	0	0-62	348	4	2-7	352	1	0-4
8APTIST MEM HOSP HUNTINGOO HUNTINGDON TN 38344	8	38	7-67	4	25	7-82	5	20	1-67	.	.		82	2	1-11	24	13	1-27	1	0	0-100	83	4	2-12	50	0	0-16
8APTIST MEMORIAL HOSP MEMPHIS TN 38146	84	15	11-40	64	47	26-53	240	8	4-13	307	0	0-3	844	4	3-7	401	3	1-9	107	1	0-14	1079	5	3-6	904	1	0-3
8APTIST MEMORIAL HOSP LAUO RIPLEY TN 38063	8	38	6-65	5	80	19-90	3	0	0-85	.	.		62	5	2-15	14	29	1-39	.	.		44	2	1-17	11	9	0-48
8APTIST MEMORIAL HOSP TIPT COVINGTON TN 38019	7	43	8-71	9	44	16-74	1	0	0-100	1	0	0-100	78	8	2-14	70	3	2-15	9	0	0-100	45	0	1-17	31	3	0-20
8APTIST MEMORIAL HOSP UNIO UNION CITY TN 38261	16	44	8-53	10	20	12-67	40	10	3-23	1	0	0-100	128	3	2-10	69	6	1-14	27	0	0-46	130	3	2-10	54	4	0-13
8APTIST MEMORIAL SPECIALTY MEMPHIS TN 38104	.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.		21	0	0-49
8EOFORO CO GENERAL HOSP SHEL8YVILLE TN 37160	8	50	6-65	6	33	9-75	22	5	2-30	.	.		86	5	2-12	22	0	1-28	7	0	0-100	44	11	1-18	26	4	0-25
8ENTON COMMUNITY HOSP CAMOEN TN 38320	8	38	7-66	1	100	3-99	4	50	1-74	.	.		90	1	1-11	32	3	1-22	4	0	0-100	105	1	1-10	20	0	0-52
8LEOSOE CO HOSP PIKEVILLE TN 37367	4	25	5-80	3	0	3-84	.	.		.	.		30	0	1-21	6	0	0-64	2	0	0-100	39	0	1-18	10	0	0-77
8LOUNT MEMORIAL HOSP- MARYVILLE TN 37801	18	22	5-48	7	29	10-72	92	7	4-17	5	0	0-99	266	4	2-9	140	6	1-11	17	0	0-94	218	7	3-9	124	2	0-7
8OLIVAR COMMUNITY HOSP 8OLIVAR TN 38008	6	0	2-66	13	46	17-67	.	.		.	.		56	5	1-14	23	0	1-27	1	0	0-100	59	5	1-15	10	0	0-94
8RAOLEY CO MEM HOSP CLEVELANO TN 37311	16	13	9-55	9	33	12-70	70	6	3-18	2	0	0-100	165	2	2-10	138	6	2-12	18	0	0-99	166	6	2-9	77	0	0-10
8RISTOL MEMORIAL HOSP- 8RISTOL TN 37620	37	27	9-43	11	73	14-67	78	8	3-18	28	0	0-40	284	5	3-9	112	3	2-13	30	0	0-84	222	6	2-8	199	2	0-5
CARTHAGE GENERAL HOSP- CARTHAGE TN 37030	1	0	0-100	5	60	12-83	1	0	0-100	.	.		29	3	0-22	8	0	1-54	2	0	0-100	33	6	1-20	8	0	0-82
CHAM8ERLAIN MEMORIAL HOSP- ROCKWOOO TN 37854	1	0	0-99	10	20	15-71	18	6	2-33	1	0	0-100	78	6	2-13	33	24	4-28	1	0	0-100	65	3	2-14	32	3	0-25
CITY OF MILAN HOSP MILAN TN 38358	6	17	12-80	9	22	12-69	10	10	1-47	.	.		51	10	1-15	19	16	1-31	2	0	0-100	37	3	1-19	24	4	0-27
CLAI8ORNE CO HOSP TAZEWELL TN 37879	7	0	2-63	4	75	7-82	8	13	0-56	1	0	0-100	126	5	2-10	42	12	1-19	11	9	0-56	86	5	1-11	46	2	0-17
CLARKSVILLE MEMORIAL HOSP CLARKSVILLE TN 37040	25	32	8-47	19	26	16-59	46	4	2-20	7	0	0-100	176	5	2-9	130	4	1-11	11	0	0-100	85	4	2-13	113	0	0-8
CLAY CO HOSP CELINA TN 38551	1	0	0-97	.			6	0	0-64	2	0	0-100	34	3	1-20	6	0	0-65	.	.		21	10	1-27	7	0	0-99
CLEVELANO COMMUNITY HOSP CLEVELANO TN 37311	5	20	0-73	2	50	9-97	9	11	1-50	1	0	0-100	43	7	1-18	37	5	0-21	4	0	0-100	30	3	1-21	12	8	0-72
COCKE CO BAPTIST HOSP INC NEWPORT TN 37821	17	0	6-50	5	80	10-81	.	.		.	.		84	2	1-11	7	14	0-75	1	0	0-100	63	6	1-13	25	0	0-26
COFFEE CO GENERAL HOSP- MANCHESTER TN 37355	5	40	1-72	.	.		2	0	0-93	.	.		44	0	1-17	5	0	0-84	4	0	0-100	49	0	1-15	7	0	0-88
COOKVILLE GENERAL HOSP COOKEVILLE TN 38501	18	50	11-56	17	24	18-63	88	8	4-18	17	0	0-84	175	3	2-10	144	1	1-11	15	0	0-99	110	5	2-11	94	1	1-9

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
COPPER BASIN MEDICAL CENTE COPPERHILL TN 37317	TN-39 *	293	12	9-18	8	50	12-72	6	67	8-73	9	22	2-53	15	20	6-45	9	56	17-75	3	0	1-81	51	10	10-34
CROCKETT GENERAL HOSP LAWRENCEBURG TN 38464	TN-40 *	622	13	8-16	39	38	14-44	24	42	13-49	9	33	4-56	60	22	14-36	16	31	20-65	7	57	4-62	70	9	11-31
CUMBERLAND MEDICAL CENTER CROSSVILLE TN 38555	TN-41 *	1614	10	8-15	86	30	16-38	53	42	19-45	27	19	6-36	81	16	13-31	60	48	26-51	15	7	6-48	213	18	13-26
DECATUR CO GENERAL HOSP- PARSONS TN 38363	TN-42	426	13	7-16	14	43	9-54	17	29	11-52	2	50	1-89	28	36	12-44	12	42	16-66	17	12	4-41	41	20	12-39
DEKALB GENERAL HOSP SMITHVILLE TN 37166	TN-43 *	368	9	9-18	15	13	11-56	10	10	8-59	6	17	1-63	28	11	8-38	14	50	16-64	7	0	2-61	77	14	13-33
DIAGNOSTIC CENTER HOSP CHATTANOOGA TN 37404	TN-44 *	553	12	10-18	17	53	21-66	19	32	11-50	9	22	6-59	64	17	12-33	23	30	21-60	11	9	3-49	137	15	9-24
DOCTORS HOSP SMITHVILLE TN 37166	TN-45 *	296	10	9-19	19	32	13-54	9	33	7-61	9	22	3-53	15	7	7-47	10	20	19-74	3	0	1-81	70	16	11-31
DOWNTOWN GENERAL HOSP CHATTANOOGA TN 37402	TN-46 *	481	10	9-17	27	26	10-43	27	22	15-50	14	14	6-48	27	11	10-41	12	25	16-67	19	16	3-38	65	20	10-30
EAST TENNESSEE BAPTIST HOS KNOXVILLE TN 37901	TN-47	3467	11	8-14	287	22	18-33	111	23	19-36	54	11	8-31	121	28	15-30	122	39	26-45	45	18	7-33	330	17	13-25
EASTWOOD HOSP INC MEMPHIS TN 38114	TN-48	929	12	7-15	33	30	12-43	39	33	18-47	25	8	6-38	39	15	13-40	27	48	23-59	20	30	7-45	78	22	11-30
EDGEFIELD HOSP NASHVILLE TN 37206	TN-49 *	574	16	10-19	31	23	11-43	27	19	13-47	18	6	6-44	36	17	10-36	29	45	21-56	20	20	10-49	51	33	13-37
EMERALD HODGSON HOSP SEWANEE TN 37375	TN-50 *	346	17	8-17	18	33	9-50	9	33	8-62	7	29	2-60	22	50	9-44	4	50	7-82	11	9	3-50	42	40	11-38
ERLANGER MEDICAL CENTER CHATTANOOGA TN 37403	TN-51	3465	11	8-14	222	19	20-36	125	25	20-38	58	16	10-32	141	18	15-29	108	30	26-46	66	23	13-37	235	25	14-27
FENTRESS CO GENERAL HOSP JAMESTOWN TN 38556	TN-52 *	507	14	10-18	10	70	13-67	22	41	16-54	5	40	1-68	31	35	12-43	19	74	24-66	11	18	6-56	122	14	12-28
FORT SANDERS REGIONAL MEDI KNOXVILLE TN 37916	TN-53 *	3132	10	7-13	289	21	16-31	96	30	17-36	49	16	8-32	109	21	16-32	84	39	27-49	40	13	7-34	203	17	12-26
FORT SANDERS SEVIER MEDICA SEVIERVILLE TN 37862	TN-54	678	15	8-16	26	19	8-41	30	43	16-48	13	38	6-51	34	29	10-38	36	39	21-53	12	25	5-52	90	22	14-32
FORUM HOSP TRENTON TRENTON TN 38382	TN-55 *	172	19	9-21	2	100	1-89	14	43	18-66	2	50	0-91	12	17	6-51	7	29	13-75	7	29	4-63	21	29	5-39
GEORGE W HUBBARD HOSP NASHVILLE TN 37208	TN-56 *	589	11	7-15	32	19	11-42	8	13	7-63	9	33	2-53	34	15	10-37	19	47	18-59	27	22	7-39	34	29	10-39
GERMANTOWN COMMUNITY HOSP GERMANTOWN TN 38138	TN-57 *	235	6	4-13	6	17	3-65	5	20	8-78	.	.		7	0	4-62	3	67	10-92	3	0	0-87	15	33	7-49
GIBSON GENERAL HOSP- TRENTON TN 38382	TN-58 *	344	19	9-19	13	69	12-61	20	40	12-50	8	13	1-55	31	32	12-43	17	41	18-61	4	25	2-75	57	19	10-32
GOODLARK MEDICAL CENTER DICKSON TN 37055	TN-59 *	1441	11	9-16	69	33	16-40	62	34	16-39	26	15	5-35	102	18	15-32	56	45	28-55	28	7	7-39	168	18	12-26
GRUNDY CO GENERAL HOSP COALMONT TN 37313	TN-60 *	5	20	0-70	.	.		.	.		.	.		.	.		.	.		.	.		2	50	0-90
HANCOCK CO HOSP SNEEDVILLE TN 37869	TN-61 *	210	10	9-20	1	100	3-99	5	40	9-78	.	.		2	0	1-89	5	60	9-79	.	.		77	19	13-33
HARDIN CO GENERAL HOSP- SAVANNAH TN 38372	TN-62 *	580	12	9-17	23	43	11-47	29	38	16-50	12	8	3-48	38	18	12-39	26	27	21-58	9	0	2-54	84	21	14-34
HARRIMAN CITY HOSP HARRIMAN TN 37748	TN-63 *	755	12	8-15	19	74	15-57	22	27	11-48	7	43	3-62	31	29	12-43	27	30	19-54	17	18	4-42	129	16	12-28
HARTSVILLE GENERAL HOSP HARTSVILLE TN 37074	TN-64 *	197	11	7-18	1	0	0-99	6	17	5-68	4	0	0-78	11	18	7-55	8	25	10-69	13	0	3-46	30	23	9-39

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Dphthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
Name/ Location	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
COPPER BASIN MEDICAL CENTE COPPERHILL TN 37317	8	13	12-73	1	0	0-97	.	.		.	.		38	3	1-18	17	6	3-38	.	.		45	7	1-17	8	0	0-97
CROCKETT GENERAL HOSP LAWRENCEBURG TN 38464	6	0	2-66	2	0	3-91	17	12	1-34	.	.		88	5	2-12	32	9	2-23	11	0	0-100	49	2	1-15	26	4	0-30
CUMBERLAND MEDICAL CENTER CROSSVILLE TN 38555	21	24	10-53	9	33	14-72	29	3	3-27	9	0	0-99	252	2	2-8	77	0	1-14	16	0	0-99	151	3	2-9	76	1	0-11
DECATUR CO GENERAL HOSP- PARSONS TN 38363	1	100	3-99	5	80	6-75	6	17	0-65	.	.		35	0	1-19	19	21	3-35	1	0	0-100	63	2	1-13	20	0	0-58
DEKALB GENERAL HOSP SMITHVILLE TN 37166	4	25	1-76	4	50	13-88	1	100	0-99	.	.		49	2	1-15	15	0	1-36	4	0	0-100	44	0	1-16	6	0	0-97
DIAGNOSTIC CENTER HOSP CHATTANOOGA TN 37404	2	0	1-90	6	17	8-74	.	.		.	.		21	0	1-29	8	13	0-55	.	.		91	2	2-11	19	0	0-46
DOCTORS HOSP SMITHVILLE TN 37166	3	0	0-84	1	0	0-97	1	0	0-98	.	.		41	2	1-18	16	0	0-36	7	0	0-100	16	0	1-33	9	0	0-87
DOWNTOWN GENERAL HOSP CHATTANOOGA TN 37402	4	50	6-81	3	33	6-87	12	0	1-42	.	.		55	0	1-15	25	12	4-32	1	0	0-100	37	0	1-18	14	0	0-70
EAST TENNESSEE BAPTIST HOS KNOXVILLE TN 37901	17	29	8-52	26	42	19-57	79	14	4-19	28	0	0-82	296	4	3-9	127	2	2-12	52	0	0-61	627	6	3-7	191	1	0-5
EASTWOOD HOSP INC MEMPHIS TN 38114	11	36	5-57	11	73	18-72	19	5	1-31	1	0	0-100	78	3	1-12	61	11	2-17	4	0	0-100	89	4	2-12	41	2	0-19
EDGEFIELD HOSP NASHVILLE TN 37206	7	29	5-67	13	54	17-67	28	14	3-29	.	.		70	4	1-14	30	10	3-27	2	0	0-100	51	6	2-16	20	0	0-37
EMERALD HODGSON HOSP SEWANEE TN 37375	7	29	5-67	4	75	6-81	8	0	2-54	.	.		36	3	1-19	23	13	3-31	4	0	0-100	47	4	1-15	8	0	0-77
ERLANGER MEDICAL CENTER CHATTANOOGA TN 37403	58	17	12-43	23	39	21-62	90	10	3-16	195	0	0-4	241	6	3-10	108	5	1-12	27	0	0-30	330	6	3-8	198	4	1-6
FENTRESS CO GENERAL HOSP JAMESTOWN TN 38556	8	13	3-60	.	.		2	0	0-93	.	.		58	5	1-15	26	12	3-30	.	.		51	2	1-15	22	0	0-44
FORT SANDERS REGIONAL MEDI KNOXVILLE TN 37916	16	31	6-51	9	56	16-75	99	9	4-17	33	0	0-55	301	4	3-9	186	4	1-10	49	0	0-45	162	6	2-9	403	0	0-4
FORT SANDERS SEVIER MEDICA SEVIERVILLE TN 37862	7	29	4-65	3	33	6-87	21	5	1-30	.	.		92	3	1-11	40	13	3-23	7	0	0-100	62	10	1-14	48	2	0-16
FORUM HOSP TRENTON TRENTON TN 38382	4	75	9-85	2	100	7-95	5	0	0-73	.	.		15	7	0-36	10	10	1-47	3	0	0-100	8	0	0-55	7	0	0-93
GEORGE W HUBBARD HOSP NASHVILLE TN 37208	7	29	6-68	6	33	10-77	6	0	0-69	2	0	0-100	63	8	2-16	20	0	1-30	2	0	0-100	61	7	1-13	22	0	0-36
GERMANTOWN COMMUNITY HOSP GERMANTOWN TN 38138	1	0	1-97	5	0	8-77	2	0	0-93	110	0	0-8	6	0	0-65	10	20	1-47	.	.		10	0	0-47	8	0	0-95
GIBSON GENERAL HOSP- TRENTON TN 38382	2	50	0-92	3	67	7-88	1	0	0-99	.	.		38	3	1-19	11	9	2-46	1	0	0-100	25	24	0-24	10	0	0-75
GOODLARK MEDICAL CENTER DICKSON TN 37055	15	33	8-55	20	40	15-57	30	10	4-28	7	0	0-100	149	1	2-10	61	0	1-15	8	0	0-100	174	3	2-9	83	1	0-9
GRUNDY CO GENERAL HOSP COALMONT TN 37313	.			.	.		.	.		.	.		.	.		.	.		.	.		.	.		.	.	
HANCOCK CO HOSP SNEEDVILLE TN 37869	.	.		1	0	1-97	.	.		.	.		29	3	1-23	5	0	0-73	.	.		47	0	1-16	10	0	0-96
HARDIN CO GENERAL HOSP- SAVANNAH TN 38372	6	33	5-70	.	.		22	5	1-29	2	0	0-100	85	6	1-12	23	9	1-28	.	.		39	3	1-18	27	4	0-31
HARRIMAN CITY HOSP HARRIMAN TN 37748	9	11	4-60	5	40	11-82	11	0	1-44	.	.		87	1	1-11	27	19	2-26	2	0	0-100	75	4	1-12	46	0	0-18
HARTSVILLE GENERAL HOSP HARTSVILLE TN 37074	6	33	8-74	1	0	1-97	.	.		.	.		16	0	0-34	4	25	0-92	1	0	0-100	12	17	0-41	12	0	0-83

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																										
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease									
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent						
HAWKINS CO MEMORIAL HOSP-ROGERSVILLE TN 37857	TN-65 *	474	10	8-16	10	50	13-68	14	36	11-56	12	17	4-50	21	10	8-43	16	13	17-62	17	12	4-43	80	15	10-29						
HAYWOOD PARK GENERAL HOSP BROWNSVILLE TN 38012	TN-66 *	597	15	10-18	23	74	20-59	33	42	21-54	9	0	2-52	49	29	13-37	16	50	23-69	8	13	3-58	72	26	13-34						
HCA DONELSON HOSPITAL NASHVILLE TN 37214	TN-67 *	1371	9	7-14	79	23	15-37	28	39	15-48	31	19	5-33	66	18	14-35	28	43	23-58	19	21	5-42	118	18	14-31						
HCA NORTH PARK HOSP CHATTANOOGA TN 37343	TN-68 *	838	11	8-15	37	19	10-38	38	32	16-46	15	20	5-45	41	12	9-34	29	41	21-56	11	18	3-50	108	22	12-29						
HCA REGIONAL HOSP LIVINGST LIVINGSTON TN 38570	TN-69 *	873	11	9-16	16	50	17-62	25	32	17-54	12	8	7-55	46	20	12-37	13	38	20-70	18	11	7-46	189	14	13-27						
HCA SOUTHERN HILLS HOSP NASHVILLE TN 37211	TN-70 *	995	11	8-15	56	16	14-39	35	23	15-44	20	25	9-47	62	24	13-35	19	37	18-60	18	11	7-46	74	23	13-33						
HCA SYCAMORE SHOALS HOSP ELIZABETHTON TN 37643	TN-71	835	17	9-17	34	44	13-44	29	17	14-47	29	7	5-34	56	25	12-34	46	43	24-52	22	45	10-48	96	24	11-29						
HENDERSONVILLE COMMUNITY H HENDERSONVILLE TN 37075	TN-72 *	346	10	7-16	16	13	7-48	10	30	7-59	4	25	2-74	19	21	8-45	14	36	16-64	7	0	3-61	41	22	9-34						
HENRY CO GENERAL HOSP-PARIS TN 38242	TN-73 *	1313	13	8-15	74	47	19-43	42	31	15-43	20	5	4-39	87	22	13-31	31	55	23-57	37	22	8-36	164	23	14-28						
HICKMAN CO HOSP CENTERVILLE TN 37033	TN-74 *	278	14	9-19	10	30	11-65	10	30	10-62	5	40	5-74	25	16	11-45	11	64	16-68	1	0	0-97	48	10	8-30						
HIGHLAND HOSP PORTLAND TN 37148	TN-75 *	408	11	7-16	8	75	5-62	23	26	12-48	6	0	1-63	17	35	8-47	9	22	15-73	14	21	5-48	52	25	9-32						
HILLSIDE HOSP PULASKI TN 38478	TN-76 *	700	11	8-16	22	32	10-46	14	43	11-57	23	9	7-40	43	28	11-36	21	38	21-62	15	40	3-44	91	11	11-29						
HOLSTON VALLEY HOSP MEDICA KINGSPORT TN 37662	TN-77	3367	11	8-15	244	24	18-33	116	24	18-36	53	13	6-29	135	26	16-31	170	29	27-44	42	26	10-37	367	23	14-25						
HUMANA HOSP EAST RIDGE CHATTANOOGA TN 37412	TN-78	641	14	8-16	22	18	8-43	35	37	16-47	20	40	6-42	27	15	9-40	15	33	19-65	15	7	2-41	83	20	11-29						
HUMANA HOSPITAL MCFARLAND LEBANON TN 37087	TN-79	1156	10	8-15	54	31	14-39	48	27	18-44	32	9	5-32	73	23	15-35	29	38	22-57	25	12	9-43	107	20	12-29						
HUMANA HOSPITAL MORRISTOWN MORRISTOWN TN 37814	TN-80	777	10	7-14	22	32	13-51	32	38	16-48	11	0	2-47	29	34	9-39	26	50	20-57	11	9	4-52	94	14	10-27						
HUMBOLDT CEDAR CREST HOSP-HUMBOLDT TN 38343	TN-81	349	15	10-19	13	69	13-62	22	55	16-54	7	29	3-61	23	17	10-44	11	36	16-69	6	17	1-65	50	16	12-36						
INDIAN PATH HOSP KINGSPORT TN 37660	TN-82	2106	11	8-15	163	29	18-35	76	34	18-39	35	9	8-35	92	28	15-33	75	43	25-48	14	0	5-47	195	20	13-27						
JACKSON CO HOSP GAINESBORO TN 38562	TN-83 *	343	12	8-17	10	80	15-70	9	11	8-63	5	20	0-69	10	30	6-55	10	70	14-68	3	0	1-81	47	19	11-36						
JACKSON-MADISON CO GENERAL JACKSON TN 38301	TN-84	5169	11	8-15	498	24	21-35	173	25	20-35	89	24	10-30	172	31	17-31	198	39	29-45	77	26	10-32	315	22	15-27						
JEFFERSON CO MEMORIAL HOSP JEFFERSON CITY TN 37760	TN-85 *	675	15	8-16	29	52	17-51	19	42	14-54	8	38	2-56	21	43	9-44	20	60	22-64	11	18	3-50	133	21	13-29						
JELLICO COMMUNITY HOSP JELLICO TN 37762	TN-86 *	391	15	9-18	24	63	21-60	12	25	9-57	10	0	2-50	14	21	7-50	14	57	17-65	6	17	1-64	52	23	11-34						
JESSE HOLMAN JONES HOSP SPRINGFIELD TN 37172	TN-87	1012	14	10-17	58	34	17-43	31	26	16-49	15	13	5-45	56	18	13-35	28	57	24-60	21	33	7-44	120	21	12-28						
JOHN W HARTON REGIONAL MED TULLAHOMA TN 37388	TN-88 *	839	11	8-15	39	49	21-52	33	30	16-47	10	20	2-49	29	31	10-41	34	41	22-55	20	20	5-42	95	24	11-28						
JOHNSON CITY JOHNSON CITY TN 37601	TN-89	2827	12	9-15	202	27	19-36	129	26	19-36	39	15	8-35	131	31	16-32	86	43	28-50	64	19	10-33	244	24	14-27						
JOHNSON CITY EYE EAR HOSP JOHNSON CITY TN 37601	TN-90 *	117	0	0-12	4	0	3-76	.	.		.	.		.	.		.	.			.		.	.							

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
HAWKINS CO MEMORIAL HOSP-ROGERSVILLE TN 37857	2	0	1-90	2	0	6-95	1	0	0-100	.	.		56	0	1-14	19	11	2-33	2	0	0-100	44	2	1-17	23	0	0-27
HAYWOOD PARK GENERAL HOSP BROWNSVILLE TN 38012	13	31	11-62	1	100	1-97	11	0	1-45	2	0	0-100	70	0	2-14	18	6	2-34	4	0	0-100	57	7	1-15	22	0	0-30
HCA DONELSON HOSPITAL NASHVILLE TN 37214	10	20	3-56	7	29	11-74	47	9	4-24	11	0	0-93	178	6	3-11	79	5	1-14	16	0	0-93	77	5	2-13	112	4	0-7
HCA NORTH PARK HOSP CHATTANOOGA TN 37343	12	8	6-56	7	14	9-71	31	19	2-25	3	0	0-100	105	4	1-11	45	7	1-18	9	0	0-99	72	1	1-12	43	2	0-17
HCA REGIONAL HOSP LIVINGST LIVINGSTON TN 38570	18	67	13-58	6	50	13-80	4	0	0-76	1	0	0-100	107	4	2-12	37	5	2-23	5	0	0-100	92	4	2-12	49	0	0-14
HCA SOUTHERN HILLS HOSP NASHVILLE TN 37211	8	13	6-66	9	17	12-78	33	12	2-25	4	0	0-100	128	5	2-11	41	5	1-19	13	0	0-63	87	8	1-11	87	3	0-9
HCA SYCAMORE SHOALS HOSP ELIZABETHTON TN 37643	10	50	2-55	17	59	15-60	43	14	3-22	.	.		92	7	2-12	40	13	1-20	16	6	0-79	51	4	1-14	43	0	0-16
HENDERSONVILLE COMMUNITY H HENDERSONVILLE TN 37075	5	20	3-72	3	33	4-85	13	23	3-43	1	0	0-100	36	3	1-20	16	6	1-35	2	0	0-100	25	8	1-24	36	0	0-22
HENRY CO GENERAL HOSP-PARIS TN 38242	7	0	3-64	10	60	14-69	35	11	1-22	10	0	0-100	141	1	1-9	78	4	1-14	6	0	0-100	127	4	2-10	84	0	0-9
HICKMAN CO HOSP CENTERVILLE TN 37033	3	67	4-86	4	25	11-87	17	6	1-34	1	0	0-100	21	0	0-28	16	0	1-35	.	.		23	17	1-26	11	0	0-90
HIGHLAND HOSP PORTLAND TN 37148	4	25	3-78	1	0	1-97	5	0	1-67	.	.		53	6	1-15	10	0	2-49	2	0	0-99	45	0	1-16	23	0	0-31
HILLSIDE HOSP PULASKI TN 38478	5	20	4-73	16	50	21-68	2	0	0-95	.	.		117	3	2-11	40	5	2-21	2	0	0-100	63	0	2-15	16	6	0-54
HOLSTON VALLEY HOSP MEDICA KINGSPORT TN 37662	22	32	6-45	32	47	20-55	102	7	3-15	24	0	0-60	299	3	2-8	119	3	1-12	23	0	0-64	496	5	3-7	182	1	0-6
HUMANA HOSP EAST RIDGE CHATTANOOGA TN 37412	11	36	5-56	10	40	11-65	24	13	2-29	.	.		69	10	2-16	22	9	1-28	9	0	0-100	41	10	1-17	25	0	0-37
HUMANA HOSPITAL MCFARLAND LEBANON TN 37087	9	11	5-62	2	50	3-91	42	2	2-21	6	0	0-100	133	2	2-10	57	7	1-17	14	0	0-98	100	3	1-11	99	2	0-8
HUMANA HOSPITAL MORRISTOWN MORRISTOWN TN 37814	4	75	7-83	4	25	4-78	11	9	1-44	7	14	0-98	67	4	1-14	60	5	1-16	4	0	0-99	81	0	2-12	50	0	0-15
HUMBOLDT CEDAR CREST HOSP-HUMBOLDT TN 38343	7	43	2-63	6	33	7-72	11	27	2-45	.	.		46	2	1-17	4	25	0-76	3	0	0-100	26	4	1-23	5	0	0-100
INDIAN PATH HOSP KINGSPORT TN 37660	19	37	11-55	28	29	18-54	43	14	3-22	14	0	0-99	261	2	2-9	126	4	1-12	20	0	0-97	121	5	2-11	151	1	0-6
JACKSON CO HOSP GAINESBORO TN 38562	7	0	3-64	6	50	10-76	2	0	0-98	.	.		49	4	1-17	14	0	1-38	1	0	0-100	25	8	1-25	9	0	0-74
JACKSON-MADISON CO GENERAL JACKSON TN 38301	35	23	10-45	33	48	25-60	137	7	3-14	46	0	0-34	547	4	3-8	307	6	2-10	70	1	0-33	684	5	3-7	310	1	0-4
JEFFERSON CO MEMORIAL HOSP JEFFERSON CITY TN 37760	6	33	3-68	3	33	4-84	1	0	0-99	.	.		88	7	2-12	38	11	3-24	7	0	0-100	70	6	1-12	24	4	0-40
JELLICO COMMUNITY HOSP JELLICO TN 37762	6	17	6-72	8	63	15-75	.	.		.	.		51	2	1-16	6	33	2-63	6	0	0-100	58	2	1-14	8	0	0-82
JESSE HOLMAN JONES HOSP SPRINGFIELD TN 37172	29	34	17-56	14	79	20-70	21	0	2-31	1	0	0-100	125	2	2-11	57	2	3-19	8	0	0-98	112	6	2-11	31	0	0-20
JOHN W HARTON REGIONAL MED TULLAHOMA TN 37388	10	20	3-56	8	13	9-67	24	4	2-28	6	0	0-100	89	0	1-12	36	3	0-21	2	0	0-100	80	1	1-12	39	0	0-18
JOHNSON CITY JOHNSON CITY TN 37601	30	27	7-43	25	40	21-60	79	9	3-17	9	0	0-100	299	4	2-8	120	2	1-12	26	0	0-86	203	2	2-9	180	1	0-5
JOHNSON CITY EYE EAR HOSP JOHNSON CITY TN 37601	.	.		.	.		.	.		70	0	0-13	1	0	0-100	.	.		.	.		2	0	0-100	3	0	0-100

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
JOHNSON CO MEMORIAL HOSP-MOUNTAIN CITY TN 37683	TN-91 *	279	14	8-18	8	88	9-67	8	38	10-69	7	29	4-63	18	39	10-49	7	43	9-70	6	17	2-64	58	16	10-31
KINGSPORT HOSP KINGSPORT TN 37664	TN-92 *	83	24	9-26	4	75	5-79	1	0	0-97	1	0	0-100	3	33	5-86	4	50	9-84	2	50	0-90	27	33	10-41
LAFOLLETTE COMMUNITY HOSP-LA FOLLETTE TN 37766	TN-93	739	19	11-19	20	60	12-51	26	35	14-48	14	0	3-44	41	20	12-38	43	47	24-53	24	4	6-39	131	40	17-34
LAKESHORE MENTAL HEALTH IN KNOXVILLE TN 37919	TN-94 *	35	0	1-22	.	.		1	0	0-99	.	.		1	0	0-97	1	0	1-97	1	0	0-100	4	0	1-74
LAUGHLIN HOSP GREENEVILLE TN 37743	TN-95 *	1202	13	9-16	60	17	13-37	46	28	16-43	24	25	3-34	36	11	10-37	51	37	27-55	42	14	9-37	190	28	15-29
LEWIS CO HOSP HOHENWALD TN 38462	TN-96 *	316	12	9-18	6	50	6-70	3	67	8-89	4	0	1-74	28	14	12-43	6	100	13-80	6	0	2-64	69	17	12-33
LEWISBURG COMMUNITY HOSP LEWISBURG TN 37091	TN-97	731	10	9-17	23	35	15-53	30	20	17-50	14	7	4-45	52	12	12-35	25	44	24-62	14	7	6-51	126	12	10-26
LINCOLN CO HOSP FAYETTEVILLE TN 37334	TN-98 *	804	13	9-17	41	24	8-34	51	22	18-43	9	11	4-56	49	22	11-35	29	41	25-60	22	14	7-43	96	22	13-32
LOUDON CO MEMORIAL HOSP LOUDON TN 37774	TN-99	405	12	9-18	17	29	12-55	15	13	14-60	14	7	5-47	34	12	10-39	12	42	18-69	11	18	2-49	62	23	11-32
MACON CO GENERAL HOSP LAFAYETTE TN 37083	TN-100*	426	12	8-17	13	69	17-66	9	44	11-67	8	38	6-63	20	20	9-46	8	50	17-77	13	0	3-46	67	12	10-30
MAURY CO HOSP COLUMBIA TN 38401	TN-101*	2049	11	9-16	115	34	20-40	73	29	19-40	30	33	9-39	115	18	15-32	76	41	32-55	48	10	6-31	177	20	12-26
MCNAIRY CO GENERAL HOSP-SELMER TN 38375	TN-102	480	17	10-19	13	69	17-67	20	45	12-51	6	0	3-65	28	29	12-44	11	36	15-67	20	25	8-45	96	25	12-30
MEOICAL CENTER OF MANCHEST MANCHESTER TN 37355	TN-103	222	15	6-16	6	83	9-75	9	56	8-62	5	0	1-69	18	39	9-48	4	100	7-82	2	50	2-90	22	9	6-40
MEMORIAL HOSP CHATTANOOGA TN 37404	TN-104	3225	10	8-15	330	19	18-33	87	32	21-41	62	21	9-31	106	23	14-31	91	24	26-48	54	31	14-40	240	18	14-27
METHOOIST HOSP OF LEXINGTO LEXINGTON TN 38351	TN-105*	507	14	9-17	18	61	17-60	32	56	18-50	7	14	3-61	30	13	12-43	8	38	16-76	9	11	2-53	90	16	10-27
METHOOIST HOSP OF MCKENZIE MCKENZIE TN 38201	TN-106*	427	12	8-17	22	59	19-58	26	23	16-51	3	67	0-82	18	28	9-48	9	44	15-72	3	0	1-82	57	11	11-33
METHOOIST HOSP OF MEMPHIS MEMPHIS TN 38104	TN-107	9064	10	9-15	793	23	23-36	323	26	22-34	141	15	12-29	381	19	18-28	297	34	32-46	179	17	12-30	589	18	15-25
METHOOIST HOSP OF MIOOLE T WINCHESTER TN 37398	TN-108	797	12	8-15	31	13	12-43	20	30	14-53	16	13	5-43	36	42	12-40	22	50	22-62	13	15	3-46	83	20	13-32
METHOOIST HOSP OF SOMERVIL SOMERVILLE TN 38068	TN-109*	345	11	9-18	18	44	13-55	13	31	8-53	4	0	0-77	22	18	11-46	17	53	24-68	12	8	2-46	38	16	10-37
METHOOIST HOSPITAL OF OYER OYERSBURG TN 38024	TN-110*	1038	14	9-16	67	37	17-40	31	32	15-47	29	21	6-35	62	27	12-33	48	44	25-53	19	21	5-41	118	20	13-29
METHOOIST MEOICAL CENTER O OAK RIDGE TN 37830	TN-111	2281	11	7-14	183	25	16-33	54	35	16-40	39	23	6-32	87	25	14-33	62	45	25-50	32	9	8-38	266	16	12-24
METRO NASHVILLE GENERAL HO NASHVILLE TN 37210	TN-112	638	13	7-15	32	22	12-44	18	11	9-47	23	26	4-36	37	14	8-34	23	30	16-54	16	6	5-44	66	26	10-31
MIOOLE TENNESSEE MEOICAL C MURFREESBORO TN 37130	TN-113*	1568	10	8-15	84	21	15-37	61	31	17-40	48	8	6-29	94	16	15-33	46	52	26-54	25	28	8-42	160	14	13-28
MORRISTOWN-HAMBLEN HOSP-MORRISTOWN TN 37814	TN-1148	911	12	9-16	44	25	14-42	34	29	16-46	11	27	4-52	47	21	12-36	41	46	25-55	14	7	3-45	124	18	13-29
NASHVILLE MEMORIAL HOSP-MAOISON TN 37115	TN-115	2605	9	7-13	190	28	18-35	100	28	19-38	46	9	5-28	118	17	14-30	51	33	25-53	30	10	6-37	178	17	12-25
NASHVILLE METRO BOROEUX HO NASHVILLE TN 37218	TN-116*	69	42	10-30	.	.		1	100	2-98	1	0	0-98	13	62	8-53	1	100	2-98	7	14	6-66	18	56	8-47

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
JOHNSON CO MEMORIAL HOSP-MOUNTAIN CITY TN 37683	3	67	3-84	3	67	6-87	5	40	1-68	.	.		26	0	1-24	13	0	1-40	1	0	0-100	31	0	1-20	9	0	0-52
KINGSPORT HOSP KINGSPORT TN 37664	5	40	1-71	.	.		.	.		.	.		10	10	0-49	5	0	0-70	.	.		3	33	0-85	3	0	0-100
LAFOLLETTE COMMUNITY HOSP-LA FOLLETTE TN 37766	3	0	6-87	12	50	19-72	11	9	1-44	.	.		92	7	1-12	23	13	2-30	6	0	0-100	74	3	3-16	33	0	0-22
LAKESHORE MENTAL HEALTH IN KNOXVILLE TN 37919	.	.		.	.		1	0	0-100	.	.		1	0	0-100	1	0	0-100	.	.		4	0	0-92	2	0	0-100
LAUGHLIN HOSP GREENEVILLE TN 37743	12	17	7-58	17	35	15-60	39	13	2-22	7	0	0-100	136	3	2-10	62	6	1-16	17	0	0-86	106	3	1-10	72	1	0-10
LEWIS CO HOSP HOHENWALD TN 38462	4	50	7-82	1	0	1-97	1	0	0-99	.	.		31	0	1-21	7	0	0-59	2	0	0-100	26	12	0-23	17	0	0-47
LEWISBURG COMMUNITY HOSP LEWISBURG TN 37091	4	0	4-78	15	40	16-63	8	0	1-53	.	.		93	5	2-12	24	4	0-27	.	.		65	6	1-13	21	10	0-36
LINCOLN CO HOSP FAYETTEVILLE TN 37334	16	19	5-50	17	47	15-59	4	25	0-78	2	0	0-100	100	4	2-13	49	6	1-17	9	0	0-100	76	3	1-12	23	4	0-38
LOUDON CO MEMORIAL HOSP LOUDON TN 37774	4	50	3-78	3	33	6-87	1	0	0-100	.	.		64	5	1-14	16	13	2-36	5	0	0-100	29	3	1-21	11	0	0-90
MACON CO GENERAL HOSP LAFAYETTE TN 37083	13	15	7-57	6	17	11-78	1	100	0-99	.	.		55	2	1-14	10	0	1-47	.	.		37	0	1-18	10	10	0-71
MAURY CO HOSP COLUMBIA TN 38401	14	29	8-57	49	33	22-52	98	8	4-17	5	0	0-99	237	3	2-9	101	1	2-13	19	0	0-70	140	5	2-9	122	2	0-7
MCNAIRY CO GENERAL HOSP-SELMER TN 38375	7	71	7-70	12	50	19-71	.	.		2	0	0-100	57	5	1-15	21	5	3-34	8	0	0-100	41	2	1-18	23	0	0-30
MEDICAL CENTER OF MANCHEST MANCHESTER TN 37355	3	33	4-85	.	.		4	0	0-79	.	.		23	13	1-26	15	0	0-37	.	.		24	4	1-25	16	0	0-85
MEMORIAL HOSP CHATTANOOGA TN 37404	22	27	10-51	22	27	15-55	97	6	5-18	3	0	0-100	409	2	3-8	225	3	2-10	44	2	0-38	358	6	3-8	169	1	0-5
METHODIST HOSP OF LEXINGTO LEXINGTON TN 38351	12	33	6-57	1	100	0-97	5	20	0-69	1	0	0-100	67	4	1-14	17	24	1-34	7	0	0-100	38	8	1-19	26	0	0-32
METHODIST HOSP OF MCKENZIE MCKENZIE TN 38201	8	38	8-69	1	100	2-98	10	10	1-47	.	.		60	5	1-14	26	0	1-25	1	0	0-100	38	3	1-18	27	0	0-28
METHODIST HOSP OF MEMPHIS MEMPHIS TN 38104	61	28	16-47	72	42	27-54	198	13	5-15	86	0	0-13	846	4	3-8	427	6	2-9	81	2	0-14	1126	5	3-7	659	2	1-4
METHODIST HOSP OF MIDDLE T WINCHESTER TN 37398	2	100	2-90	6	50	10-76	24	4	2-28	2	0	0-100	114	7	3-13	56	4	2-18	16	0	0-92	63	3	2-15	42	2	0-16
METHODIST HOSP OF SOMERVIL SOMERVILLE TN 38068	2	50	3-92	10	30	12-67	1	0	0-100	.	.		27	0	0-23	43	5	1-19	3	0	0-100	29	0	1-21	10	0	0-56
METHODIST HOSPITAL OF DYER OYERSBURG TN 38024	12	25	6-57	5	40	7-76	30	7	2-25	9	0	0-99	128	5	2-10	93	12	2-15	10	0	0-100	87	6	1-11	34	0	0-19
METHODIST MEDICAL CENTER O OAK RIDGE TN 37830	28	18	6-42	30	20	17-53	86	7	3-16	31	3	0-59	225	4	2-9	112	4	1-12	15	0	0-73	121	7	2-10	179	1	0-5
METRO NASHVILLE GENERAL HO NASHVILLE TN 37210	7	29	4-66	9	33	8-64	25	4	2-29	3	0	0-100	43	7	1-17	27	7	1-26	6	0	0-100	52	10	1-15	18	6	0-54
MIDDLE TENNESSEE MEDICAL C MURFREESBORO TN 37130	24	21	7-46	10	50	14-69	68	3	3-17	9	0	0-100	178	2	2-9	107	2	1-12	17	0	0-90	120	4	2-11	127	3	0-7
MORRISTOWN-HAMBLEN HOSP-MORRISTOWN TN 37814	9	56	9-66	3	33	9-90	30	7	3-28	2	0	0-100	118	5	2-11	58	5	2-18	5	0	0-100	66	0	1-13	37	3	0-17
NASHVILLE MEMORIAL HDSP-MADISON TN 37115	19	32	9-53	18	22	17-61	66	5	2-17	70	0	0-13	274	5	2-9	126	2	1-12	11	0	0-100	228	7	2-8	242	1	0-5
NASHVILLE METRO BDROEUX HD NASHVILLE TN 37218	1	100	0-97	.	.		.	.		.	.		1	100	0-98	11	18	2-46	.	.		.	.		.	.	

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
NORTHSIDE HOSP-JOHNSON CITY TN 37601	TN-117*	758	9	6-14	28	36	10-43	19	16	12-52	15	27	2-41	43	23	12-38	18	33	20-63	17	24	6-46	75	13	11-31
NORTHWEST GENERAL HOSP KNOXVILLE TN 37921	TN-118*	67	0	1-16	1	0	0-99	.	.		.	.		1	0	0-97	.	.		2	0	0-90	9	0	2-51
PARK WEST HOSP KNOXVILLE TN 37933	TN-119*	2366	9	7-13	139	26	20-38	52	19	18-43	24	17	5-38	93	24	15-33	67	46	23-47	25	16	7-41	167	16	11-25
PARKRIOGE HOSP CHATTANOOGA TN 37404	TN-120*	2054	11	7-14	156	29	17-35	79	24	20-41	37	22	6-32	89	24	14-32	51	41	24-51	29	17	5-36	164	20	13-28
PARKVIEW MEDICAL CENTER NASHVILLE TN 37203	TN-121	2826	8	7-14	300	20	20-35	74	20	18-39	35	9	7-35	63	22	14-36	67	28	24-48	29	24	7-38	160	13	13-27
PERRY MEMORIAL HOSP LINDEN TN 37096	TN-122*	307	15	8-17	14	64	12-58	7	43	7-67	8	25	3-57	17	29	6-44	12	33	19-70	7	0	3-61	47	21	10-34
REGIONAL HOSPITAL OF JACKS JACKSON TN 38305	TN-123	1110	12	8-15	64	28	18-43	14	43	14-61	22	14	7-41	25	40	14-49	3	33	5-86	33	15	9-40	160	20	12-27
REGIONAL MEDICAL CENTER AT MEMPHIS TN 38103	TN-124	1092	22	10-17	85	40	16-38	81	30	17-38	14	36	7-51	51	24	12-35	33	55	23-56	51	31	7-32	95	31	11-28
RHEA CO MEDICAL CENTER DAYTON TN 37321	TN-125	383	16	8-17	13	85	17-67	11	55	10-60	6	0	2-63	12	33	8-55	19	47	18-60	6	0	4-66	55	18	10-33
RIVER PARK HOSP MCMINNVILLE TN 37110	TN-126*	841	14	10-17	31	26	15-48	41	41	18-46	10	40	2-49	38	13	14-41	22	55	22-62	31	29	8-39	125	23	12-28
RIVERCHASE HOSP CHATTANOOGA TN 37415	TN-127	384	8	7-16	17	18	8-49	15	27	10-54	11	0	5-52	18	6	9-47	15	67	19-66	9	11	3-55	45	4	8-31
SCOTT CO HOSP-ONEIDA TN 37841	TN-128*	640	11	8-16	7	43	5-64	29	28	16-49	15	7	2-40	21	10	9-44	24	63	25-63	9	0	5-59	120	21	13-29
SCOTT MEMORIAL HOSP LAWRENCEBURG TN 38464	TN-129*	359	16	9-19	18	61	16-59	10	40	8-60	2	0	0-90	13	31	9-55	10	60	16-72	6	0	1-63	68	22	12-33
SEQUATCHIE GENERAL HOSPITA DUNLAP TN 37327	TN-130*	214	13	8-18	6	67	11-77	6	67	8-73	5	40	1-68	13	38	6-51	9	44	13-70	6	33	4-66	31	10	8-36
SMITH CO MEMORIAL HOSP-INC CARTHAGE TN 37030	TN-131*	399	13	10-19	12	58	7-55	21	33	15-54	8	13	4-58	24	25	11-45	12	50	20-71	15	13	4-45	66	26	13-35
SMYRNA HOSP INC SMYRNA TN 37167	TN-132*	160	14	7-18	3	33	2-81	9	11	8-62	3	0	0-82	4	25	1-74	7	86	11-74	2	0	0-93	30	17	5-33
SOUTH PITTSBURG MUNICIPAL SOUTH PITTSBURG TN 37380	TN-133*	458	13	8-17	15	60	13-59	11	36	12-64	8	13	2-55	27	11	8-39	13	62	20-70	6	0	4-68	74	26	12-33
ST FRANCIS HOSP MEMPHIS TN 38138	TN-134	4951	11	8-14	360	25	20-35	137	26	21-38	92	20	10-29	206	27	17-30	121	40	30-49	92	18	11-32	337	25	14-25
ST JOSEPH HOSP MEMPHIS TN 38101	TN-135	2714	12	8-15	194	32	20-37	106	29	18-36	38	11	6-32	186	22	14-27	52	33	25-53	89	33	15-37	155	21	12-26
ST MARYS MEDICAL CENTER KNOXVILLE TN 37917	TN-136*	4576	11	8-14	404	24	19-33	165	28	19-34	90	17	10-29	194	28	16-29	128	43	28-46	57	14	8-32	352	17	14-26
ST MARYS NORTH HOSPITAL LAKE CITY TN 37769	TN-137*	145	12	5-17	4	100	5-79	.	.		5	60	1-68	4	50	5-78	5	20	11-82	2	0	1-89	17	6	4-41
ST THOMAS HOSP NASHVILLE TN 37202	TN-138	5921	7	9-15	422	20	21-35	172	20	21-36	85	13	10-29	243	17	18-30	404	17	30-43	50	8	7-32	398	14	15-26
STONES RIVER HOSP WOODBURY TN 37190	TN-139	320	13	9-18	12	50	15-66	16	44	13-56	3	33	1-81	9	33	5-58	14	50	17-65	18	6	2-38	69	19	10-30
SUMNER MEMORIAL HOSP GALLATIN TN 37066	TN-140*	1011	13	10-17	69	39	19-43	27	22	14-47	18	22	5-41	39	28	12-38	38	29	26-58	21	14	8-45	144	28	15-31
SWEETWATER HOSP SWEETWATER TN 37874	TN-1418	539	12	11-19	18	50	9-49	29	17	15-48	21	0	3-36	23	26	11-46	31	42	24-58	7	0	1-59	103	18	14-32
TAKOMA HOSP GREENEVILLE TN 37743	TN-142	809	16	10-17	28	36	18-53	41	39	18-46	18	17	5-42	44	18	12-37	30	63	23-58	29	21	7-39	111	22	13-30

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Dphthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
NORTHSIDE HOSP-JOHNSON CITY TN 37601	2	50	0-91	6	33	8-74	23	4	1-27	3	0	0-100	65	0	1-13	49	4	2-18	6	0	0-100	51	4	1-15	62	0	0-12
NORTHWEST GENERAL HOSP KNOXVILLE TN 37921	.	.		.	.		.	.		.	.		4	0	0-94	4	0	0-80	.	.		2	0	0-99	21	0	0-47
PARK WEST HOSP KNOXVILLE TN 37933	16	19	6-51	22	45	21-62	64	5	3-19	8	0	0-100	273	4	3-10	112	4	2-13	47	0	0-32	150	5	2-9	163	1	0-6
PARKRIDGE HOSP CHATTANOOGA TN 37404	13	31	6-55	23	43	18-58	69	13	3-19	11	9	0-98	302	4	2-8	91	3	1-13	28	0	0-85	145	3	2-9	199	0	0-5
PARKVIEW MEDICAL CENTER NASHVILLE TN 37203	15	33	5-51	11	45	16-70	26	0	2-28	160	1	0-5	237	3	2-9	104	2	1-13	35	0	0-62	345	4	3-8	122	1	0-7
PERRY MEMDRIAL HOSP LINDEN TN 37096	2	50	0-90	3	67	7-88	2	0	0-93	.	.		32	0	1-20	12	8	1-42	2	0	0-100	34	0	1-19	13	0	0-66
REGIONAL HOSPITAL OF JACKS JACKSON TN 38305	15	33	6-52	5	40	9-79	48	17	5-25	.	.		116	6	2-10	49	2	2-20	5	0	0-91	35	23	2-22	172	2	0-5
REGIONAL MEDICAL CENTER AT MEMPHIS TN 38103	15	27	5-50	26	69	18-56	65	22	3-19	8	0	0-100	66	15	2-16	29	21	3-27	5	0	0-100	64	9	1-14	32	0	0-23
RHEA CO MEDICAL CENTER DAYTON TN 37321	9	11	7-65	2	50	1-89	.	.		.	.		51	8	1-15	7	14	0-59	.	.		52	4	1-15	10	10	0-84
RIVER PARK HOSP MCMINNVILLE TN 37110	7	0	3-64	18	33	19-64	36	3	2-22	2	0	0-100	84	5	2-13	65	6	2-16	3	0	0-100	83	2	2-12	34	3	1-19
RIVERCHASE HOSP CHATTANOOGA TN 37415	2	50	0-92	4	25	10-85	9	11	0-51	.	.		42	2	1-17	15	0	0-38	3	0	0-100	41	2	1-17	20	0	0-36
SCOTT CO HOSP-ONEIDA TN 37841	5	0	2-71	3	33	5-86	.	.		.	.		48	4	1-16	16	0	1-35	3	0	0-92	78	1	2-12	18	0	0-56
SCOTT MEMORIAL HOSP LAWRENCEBURG TN 38464	14	0	6-53	2	0	2-90	8	13	0-54	.	.		55	11	2-16	13	0	0-40	2	0	0-100	36	8	2-22	6	0	0-85
SEQUATCHIE GENERAL HOSPITA DUNLAP TN 37327	1	100	1-98	.	.		.	.		.	.		34	0	0-19	5	0	0-74	.	.		19	5	1-30	9	0	0-56
SMITH CO MEMDRIAL HOSP-INC CARTHAGE TN 37030	1	0	0-99	10	0	11-65	4	0	0-85	.	.		48	2	1-17	7	0	0-70	2	0	0-100	31	3	1-20	15	0	0-68
SMYRNA HOSP INC SMYRNA TN 37167	4	25	1-76	5	60	10-80	2	0	0-90	.	.		25	8	1-24	7	0	1-57	.	.		18	6	0-32	4	0	0-99
SOUTH PITTSBURG MUNICIPAL SOUTH PITTSBURG TN 37380	5	80	5-74	.	.		6	17	0-63	.	.		58	3	2-15	32	6	2-24	3	0	0-100	32	0	2-22	26	8	0-40
ST FRANCIS HOSP MEMPHIS TN 38138	64	27	14-44	18	56	16-60	114	13	4-16	97	0	0-8	502	4	3-8	278	6	2-10	52	0	0-24	487	6	3-7	260	1	0-4
ST JOSEPH HOSP MEMPHIS TN 38101	19	21	10-54	26	38	19-57	25	12	3-30	5	0	0-100	262	3	3-9	138	8	2-12	14	7	0-76	221	8	2-8	122	3	0-7
ST MARYS MEDICAL CENTER KNOXVILLE TN 37917	25	20	9-48	47	38	21-51	175	7	4-14	29	0	0-46	474	5	3-8	255	2	1-10	54	0	0-45	265	8	3-9	355	1	0-4
ST MARYS NORTH HOSPITAL LAKE CITY TN 37769	2	50	0-93	3	0	5-86	1	0	0-100	.	.		15	0	0-41	8	13	1-53	.	.		15	13	0-36	5	0	0-100
ST THOMAS HOSP NASHVILLE TN 37202	54	15	14-46	30	30	24-61	97	9	4-16	10	0	0-98	532	3	3-8	151	1	1-11	44	0	0-38	1159	3	3-6	344	1	0-4
STONES RIVER HDSP WOOOBURY TN 37190	5	20	5-74		.		6	0	0-68	.	.		32	0	1-20	14	0	1-38	2	0	0-100	22	0	0-26	16	6	0-46
SUMNER MEMORIAL HOSP GALLATIN TN 37066	16	19	8-54	14	14	15-63	41	10	3-23	1	0	0-100	127	2	2-10	61	11	2-18	13	0	0-100	91	7	2-12	48	0	0-14
SWEETWATER HOSP SWEETWATER TN 37874	4	50	7-82	12	25	21-74	6	0	0-66	.	.		53	4	1-15	9	11	0-54	4	0	0-100	48	2	1-16	11	0	0-71
TAKOMA HOSP GREENEVILLE TN 37743	9	33	8-66	10	30	15-70	22	18	2-30	2	0	0-100	102	8	2-12	37	11	2-23	3	0	0-98	76	8	2-13	54	0	0-13

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS		Overall			High Risk Diagnostic Categories																				
					Cancer			Stroke			GI Catastrophes			Severe Chronic Heart Disease			Severe Acute Heart Disease			Metabolic & Electrolyte Disturbances			Pulmonary Disease		
Name/ Location	Comment/ Reference	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
TENNESSEE CHRISTIAN MEDICA MAOISON TN 37115	TN-143	1079	8	6-13	42	17	14-42	24	54	14-50	22	14	4-37	44	23	11-35	19	26	19-61	20	25	5-41	100	17	12-29
THREE RIVERS COMMUNITY HOS WAVERLY TN 37185	TN-144*	223	13	9-19	10	50	12-67	6	50	6-69	2	50	0-91	18	17	11-51	8	25	17-77	5	0	1-68	30	17	9-39
TRINITY HOSP ERIN TN 37061	TN-145*	422	14	9-17	15	67	21-69	12	25	7-54	6	17	1-63	34	15	10-38	9	33	16-73	3	67	0-83	59	24	11-32
UNICOI CO MEMORIAL HOSP ERWIN TN 37650	TN-146*	386	9	8-16	11	9	4-51	10	30	10-63	7	14	2-60	12	17	8-56	9	56	20-78	13	0	4-49	65	20	13-35
UNIVERSITY MEDICAL CENTER LEBANON TN 37087	TN-147*	451	9	7-15	17	41	11-53	14	21	13-59	6	0	1-63	24	21	9-42	9	33	12-69	3	0	1-81	69	12	9-28
UNIVERSITY OF TN MEDICAL C MEMPHIS TN 38103	TN-148	946	9	7-14	76	28	16-38	7	29	9-70	19	16	6-42	35	14	13-41	8	13	12-71	33	15	6-35	32	13	12-42
UNIVERSITY OF TN MEMORIAL KNOXVILLE TN 37920	TN-149	3302	12	8-14	209	31	20-37	87	28	18-38	49	16	8-32	119	20	14-29	128	44	27-45	31	13	6-36	235	14	12-25
VANDERBILT UNIVERSITY MEDI NASHVILLE TN 37232	TN-150	2176	8	7-14	234	23	18-34	54	22	15-39	49	8	8-32	61	15	13-35	69	22	25-48	38	8	4-31	95	6	10-27
VOLUNTEER GENERAL HOSP- MARTIN TN 38237	TN-151	915	13	8-16	45	27	11-38	49	27	18-43	17	6	6-44	40	13	11-38	37	65	26-58	28	29	8-40	90	22	10-28
WARREN REGIONAL HOSP MCMINNVILLE TN 37110	TN-152*	339	9	7-16	8	50	9-68	13	38	13-60	9	11	2-52	13	38	9-55	11	45	16-69	5	0	2-69	38	11	7-33
WAYNE CO GENERAL HOSP WAYNESBORO TN 38485	TN-153	316	13	9-18	8	50	13-72	6	17	8-73	6	67	3-65	19	37	9-47	10	40	19-75	8	13	4-59	57	12	8-29
WEST SIDE HOSP NASHVILLE TN 37203	TN-154*	1072	5	5-12	107	12	15-34	16	19	11-53	10	30	4-54	23	9	9-42	16	25	16-61	8	13	2-57	68	13	9-29
WESTERN MENTAL HEALTH INST BOLIVAR TN 38074	TN-155*	15	0	1-37	.	.		.	.		.	.		3	0	2-82	.	.		1	0	0-98	.	.	
WHITE CO COMMUNITY HOSP SPARTA TN 38583	TN-156*	350	15	7-16	12	67	11-61	23	35	12-47	12	17	2-45	18	28	8-46	12	50	14-64	12	8	3-47	38	18	10-36
WHITWELL MEDICAL CENTER WHITWELL TN 37397	TN-157*	283	9	8-18	9	56	10-66	3	0	3-83	7	0	1-58	8	0	4-58	16	19	17-62	4	0	2-75	43	16	11-36
WILLIAMSON MEDICAL CENTER FRANKLIN TN 37065	TN-158	973	14	10-17	57	42	20-46	32	31	16-48	17	18	5-43	55	22	14-37	41	49	27-57	21	5	6-41	102	18	13-30
WOODS MEMORIAL HOSP ETOWAH TN 37331	TN-159*	667	13	10-17	27	67	17-52	44	32	20-47	13	8	4-47	46	35	13-38	17	41	20-65	12	25	5-52	101	10	11-28

*Written Comments Not Submitted.

Medicare Hospital Mortality Information

HOSPITALS Name/ Location	High Risk Diagnostic Categories									Low Risk Diagnostic Categories																	
	Renal Disease			Sepsis			Severe Trauma			Ophthalmology			GI Disease			Urology			Gynecology			Low Risk Heart Disease			Orthopedics		
	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent	Number of Patients	Actual Mortality Rate/Percent	Range of Predicted Mortality Rate/Percent
TENNESSEE CHRISTIAN MEDICA MADISON TN 37115	8	38	6-65	6	17	9-75	13	8	2-41	5	0	0-99	127	3	2-10	39	0	2-21	8	0	0-100	74	1	1-12	61	2	0-12
THREE RIVERS COMMUNITY HOS WAVERLY TN 37185	8	38	10-70	3	0	4-84	2	0	0-94	.	.		34	9	1-19	7	0	0-59	2	0	0-100	20	5	1-28	9	0	0-89
TRINITY HOSP ERIN TN 37061	8	38	6-66	7	14	9-72	3	0	1-81	.	.		54	7	2-17	38	11	3-24	2	0	0-100	36	6	1-18	19	0	0-57
UNICOI CO MEMORIAL HOSP ERWIN TN 37650	3	0	2-83	1	0	3-99	9	11	0-51	.	.		48	4	1-16	16	6	1-35	2	0	0-100	42	2	1-17	31	0	0-22
UNIVERSITY MEDICAL CENTER LEBANON TN 37087	7	14	13-77	2	0	3-91	6	17	1-62	3	0	0-100	56	5	1-15	12	8	4-47	8	0	0-99	29	7	1-22	25	0	0-40
UNIVERSITY OF TN MEDICAL C MEMPHIS TN 38103	40	5	3-36	9	33	16-74	2	0	0-90	3	0	0-100	77	10	3-16	157	1	1-11	11	0	0-90	50	8	2-17	16	0	0-59
UNIVERSITY OF TN MEMORIAL KNOXVILLE TN 37920	33	9	6-41	17	29	16-61	62	15	4-20	132	0	0-6	287	7	4-11	96	13	2-14	27	0	0-71	624	7	3-7	132	2	0-6
VANDERBILT UNIVERSITY MEDI NASHVILLE TN 37232	62	10	3-34	13	15	19-69	47	23	3-21	117	0	0-7	109	6	3-13	56	4	2-17	12	8	0-72	212	6	3-9	102	1	0-8
VOLUNTEER GENERAL HOSP- MARTIN TN 38237	21	19	8-49	6	33	9-75	44	14	3-22	3	0	0-100	118	3	2-10	27	4	0-25	9	0	0-100	69	4	2-13	66	2	0-11
WARREN REGIONAL HOSP MCMINNVILLE TN 37110	1	0	0-100	2	0	2-90	4	0	0-77	.	.		49	4	1-16	18	11	3-36	5	0	0-100	42	5	1-17	10	0	0-65
WAYNE CO GENERAL HOSP WAYNESBORO TN 38485	5	20	10-82	3	67	9-91	1	0	0-100	.	.		33	9	1-21	12	0	0-44	1	0	0-100	39	5	1-18	16	0	0-60
WEST SIDE HOSP NASHVILLE TN 37203	8	38	3-61	7	29	10-73	24	0	1-27	.	.		86	3	1-12	156	1	1-11	45	0	0-42	47	4	1-16	155	0	0-6
WESTERN MENTAL HEALTH INST BOLIVAR TN 38074	.	.		.	.		1	0	0-100	.	.		.	.		1	0	0-99	.	.		.	.		1	0	0-100
WHITE CO COMMUNITY HOSP SPARTA TN 38583	4	0	1-77	3	33	4-84	1	100	0-99	1	0	0-100	43	2	1-18	5	20	0-85	2	0	0-100	35	3	1-19	11	0	0-69
WHITWELL MEDICAL CENTER WHITWELL TN 37397	9	0	3-59	1	100	0-97	.	.		.	.		30	13	3-26	9	0	0-51	.	.		23	0	0-25	8	0	0-92
WILLIAMSON MEDICAL CENTER FRANKLIN TN 37065	12	25	10-61	25	52	21-60	42	5	3-23	1	0	0-100	101	6	2-12	54	4	2-18	8	0	0-100	60	2	1-14	66	2	0-11
WOODS MEMORIAL HOSP ETOWAH TN 37331	10	40	8-64	1	100	2-98	2	0	0-91	.	.		93	1	1-11	6	0	0-73	11	0	0-99	91	1	2-12	35	0	0-18

*Written Comments Not Submitted.

BAPTIST HOSPITAL
2000 CHURCH STREET NASHVILLE, TENNESSEE 37236

615 329-5213

C DAVID STRINGFIELD, F A C H A
PRESIDENT

October 28, 1987

William L. Roper, M.D., Administrator
Department of Health and Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

Baptist Hospital is within the expected range of mortality in all categories listed in the HCFA report.

Baptist has devoted itself to the rendering of quality health care. This hospital has an active, ongoing quality assurance program which monitors the delivery of health care by our many physicians and health care professionals. Our quality assurance program ensures that Baptist Hospital's patients have available to them the latest innovations in medical technology, and it ensures the credentialling of our medical staff and health care professionals and the appropriate utilization of our resources.

Baptist Hospital has developed indicators of quality care which are used to monitor the delivery of our own health care services. We do not believe that the ability to measure the quality of care has been adequately developed by any agency or institution to enable cross comparisons between institutions. In addition, we believe that mortality statistics alone do not provide an adequate measure of the quality of care at any institution. Even the complex HCFA statistical model, developed to create and report mortality statistics, does not consider all the variables associated with the causes or circumstances surrounding death.

The ability or inability to measure the quality of care has long been a debate within the health care industry. We agree with Dennis S. O'Leary, M.D., President of the Joint Commission on Accreditation of Health Care Organizations when he states, "There is no meaningful base of practical experience in applying indicators in quality of care evaluation models. When it comes to determining thresholds for expected performance, it has become a guessing game. Reality is that there is essentially no clinical literature to support any of the determinations as to appropriate thresholds."

We strongly suggest that if patients have questions with regards to the data published by HCFA, that they contact their physicians and their hospital of choice for an interpretation and a discussion of the usefulness of the data.

We appreciate this opportunity to comment on HCFA's mortality reporting system.

Very truly yours,

C. David Stringfield, FACHA
President

BAPTIST MEMORIAL HOSPITAL
HUNTINGDON

P.O. Box 568
Huntingdon, Tennessee 38344

October 26, 1987

Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

The Health Care Financing Administration Mortality Statistics for Baptist Memorial Hospital - Huntingdon have been reviewed and evaluated.

Batist Memorial Hospital - Huntingdon is a 70 bed, non-profit organization, located in rural West Tennessee. An Intermediate Care Nursing Home facility is located adjacent the hospital; therefore many admissions to the hospital are elderly patients from the nursing home facility.

From January 1, 1986 through December 31, 1986, there were a total of 2,424 patients admitted to Baptist Memorial Hospital - Huntingdon. Twenty (20) of these admissions were Medicare patients with a principal diagnosis of cancer and 13 (65%) of the 20 patients expired. 62% (8 patients) of the 65% were admitted to the hospital critically ill or terminal; death was expected and there was a "Do Not Resuscitate" (No CPR) order in each instance. 8% (1 patient) expired as a result of an acute complicating condition of the cancer. 30% (4 patients) had complicating conditions of their disease on admission to the hospital and death was a significant possibility. 100% of the 13 patients had widespread metastasis and there was no possibility of a cure for their disease.

Huntingdon, Tennessee has no skilled nursing home facilities and the number of skilled nursing home beds in the surrounding areas are limited; therefore, hospital admission is usually necessary for persons in the terminal stage of a disease process. The deaths contained in HCFA's mortality rates were patients admitted to the facility for pain control, rather than an admission for treatment or remission of the disease. All were patients that reside in the immediate or surrounding area and hospitalization near their home and family was more convenient than traveling to a larger hospital with an organized Oncology Unit. This is especially significant since all of the patients had already received treatment in other facilities and it was known that their disease was terminal.

BMH-Huntingdon is accreditated by the Joint Commission on Hospital Accreditation and a vital requirement for this accreditation is a comprehensive Quality Assurance Program, whereby the hospital and physician performance is assessed for quality. This assessment is dependent upon many variables and requires a look at many quality indicators and mortality is one of these indicators. In addition to many other quality assurance functions, the Medical Staff of BMH-Huntingdon reviews the charts of all patients that expire while hospitalized in the facility. This review is conducted on a continuous, ongoing basis to insure that appropriate treatment and quality patient care was rendered to the patients.

Again, cases outside the predicted HCFA range were expected and no quality problem has been identified in the in depth review of these cases.

The goal of the Board of Trustees, Administration and Medical Staff is to provide optimal quality care to all patients who seek treatment at Baptist Memorial Hospital - Huntingdon.

Sincerely,

Stephen L. Mansfield

Stephen L. Mansfield
Administrator

SLM/vh/402

BAPTIST MEMORIAL HOSPITAL
MEDICAL CENTER
899 MADISON AVENUE
MEMPHIS, TENNESSEE 38146

JOSEPH H. POWELL, PRESIDENT

Medicare Provider #: 440048

RESPONSE TO HCFA MORTALITY ANALYSIS

As an institution dedicated to quality patient care, Baptist Memorial Hospital is pleased that the 1986 mortality statistics released by the Health Care Financing Administration (HCFA) with respect to Medicare patients show that the experience at this institution is well within the range of predicted mortality rates.

It should be noted, however, that the actual experience at Baptist Memorial Hospital appears to be even better than HCFA's figures indicate because the HCFA model omits many factors that may have a significant impact on mortality. Specifically, the model does not consider measures of severity of illness such as the patient's general health status, the stage of the patient's illness, whether the patient was admitted on an emergency basis, whether the patient was transferred to the hospital from a long-term care facility, whether the patient's illness was considered terminal, or other factors that might be measures of how ill the patient was at time of admission and thus be helpful in predicting the probability of death. The exclusion of these severity of illness factors from the analysis is especially significant for a tertiary care facility like Baptist Memorial Hospital, which treats patients in the most acute stages of illnesses, as well as those suffering the long-term effects of chronic, debilitating diseases.

For example, HCFA's model adjusts for patients who are transferred from another hospital, but not for patients transferred from nursing homes. Because nursing homes are designed to provide a level of care below that which is provided in acute care facilities, nursing home patients who experience acute episodes of illness are generally transferred to hospitals for more intensive care. These patients, given the nature of their illnesses, often expire in the hospital. Our internal analysis of the "Sepsis" category supports the significance of the nursing home to hospital transfer by identifying that 100% of the patients within that category who came from nursing homes expired in the hospital.

Another important factor suggested by our internal analysis is the relationship between emergency admission (as a measure of severity of illness) and probability of death. For example, HCFA reports a 5% mortality rate (actually 4.6%) for Baptist Memorial Hospital in the "Low Risk Heart Disease" category. However, when this information is analyzed further, it is discovered that the mortality rate of those admitted through the Emergency Department (as an indicator of severity on admission) is 5.9%, over a full percentage point higher, while only 3.8% of the non-emergency admissions expired. When emergency admission is teamed with presence or absence of comorbid conditions, we see an even greater disparity of mortality rates, with 7% of the emergency admissions with comorbid conditions resulting in death, and only 3% of the non-emergency admissions without comorbid conditions dying. This relationship is of particular significance at Baptist Memorial Hospital since over 25% of our admissions come through the Emergency Department, and thus represent patients in acute distress with major system failures.

The fact that the patients treated at Baptist Memorial Hospital are acutely ill at the time of admission is further supported by the fact that 20% of the mortalities in the "Sepsis" category, 16% of those in the "Low Risk Heart Disease" category, and 27% of those in the "Stroke" category died within 48 hours of admission. Overall, 17% of the mortalities occurred within the first 48 hours, a figure which strongly suggests a severly ill patient population. In addition, it is important to note that the HCFA data considers only Medicare patients, and in so doing focuses on that portion of the population most likely to experience multi-system disorders and terminal illnesses. In support of this assertion, our internal analysis shows that the mortality rate for the last admission per patient of non-Medicare patients at Baptist Memorial Hospital is only 1.4%, significantly lower than that of the Medicare rate of 8.9%.

With regard to the accuracy of the data, there is evidence of certain classification problems in HCFA's report. For example, one patient who was listed as dying after discharge from Baptist Memorial Hospital actually expired in another acute care facility. According to HCFA's model, the last admission for this patient was that which occurred at the second acute care facility; therefore, this mortality should be included in the figures for that facility, not in those for Baptist Memorial Hospital. In another instance, a patient who had experienced numerous admissions over a 10 month period for treatment of metastatic lung cancer was admitted and treated briefly for sinus tachycardia and hypotension. Several days after discharge the patient died from the effects of the cancer. However, since the patient's last admission was for heart problems, the death was erroneously classified in the "Low Risk Heart Disease" category by HCFA.

Baptist Memorial Hospital places a primary emphasis on the monitoring and evaluation of the care provided within its walls. Patient care activities throughout the organization are continuously evaluated to identify and address potential problems and opportunities to improve the care provided. This evaluation includes, among other things, a thorough review of 100% of the deaths that occur within the institution.

In light of this internal emphasis on quality, it is gratifying to see that the HCFA report is a favorable one with respect to this institution. The hospital will, nevertheless, keep in mind that the statistics should be used as a means for suggesting areas for further analysis or evaluation, rather than as "ends" in themselves.

We appreciate the opportunity to comment on the HCFA mortality data release, and hope that the comments made have added to the understanding of the complexities of the issue of quality and the interpretation of the statistics presented in this document.

BAPTIST MEMORIAL HOSPITAL
LAUDERDALE

326 Asbury
Ripley, Tennessee 38063

October 26, 1987

Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

According to the HCFA Statistical Analysis, Baptist Memorial Hospital - Lauderdale is within all the predicted ranges.

Baptist Memorial Hospital - Lauderdale is a 70-bed acute care facility, JCAH and State of Tennessee accredited, with 18 beds designated for skilled care (Swing Beds); the 18 Swing Beds were approved September, 1986. Prior to approval of the skilled nursing care beds many terminally ill patients were admitted to the hospital for skilled care which was not otherwise available in the community.

There are two (2) nursing homes within the community which contribute to an elderly, chronically and terminally ill patient population.

The patients that expired in the hospital were admitted because of critical or terminal illnesses; pulmonary disease being the most predominate reason for admission.

Cases reviewed showed that all the deaths were expected and unavoidable due to the severity of illness and pre-existing conditions. Twenty-five percent (25%) of the deaths were patients designated as no CPR/DNR (No Cardiopulmonary Resuscitation/Do Not Resuscitate) at the time of admission.

One of the major requirements for accreditation, which has been met by our hospital, is a Quality Assurance Plan and Program approved by the hospital and medical staff that provides for continuous monitoring of the care provided by the hospital; mortality review being one important aspect of this program that provides for review of all deaths occurring within the hospital and no quality problems have been found.

The goal of the Board of Trustees, Administration and Medical Staff is to provide optimal quality care to all patients who seek treatment at Baptist Memorial Hospital - Lauderdale.

Respectfully submitted,

William E. Torrence, Jr.

William E. Torrence, Jr.
Administrator

WET/vh/400

BAPTIST MEMORIAL HOSPITAL
TIPTON

1995 Highway 51 South
Covington, Tennessee 38019

October 26, 1987

Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

The Health Care Financing Administration Mortality Statistics have been reviewed and evaluated.

Baptist Memorial Hospital-Tipton is within the predicted ranges. All cases that expired in the hospital were admitted because of critical or terminal illnesses and death was unpreventable. No quality problems have been found in the thorough review of these cases.

Baptist Memorial Hospital - Tipton is a JCAH approved 100 bed hospital. The Hospital Board and the Medical Staff strive for optimal patient care through an active Quality Assurance Program. Mortality Review is one important aspect of this program. The Mortality Review is conducted by the Medical Staff in all deaths occurring in the hospital. No quality problems have been identified.

The goal of the Board of Trustees, Administration and Medical Staff is to provide optimal quality care to all patients who seek treatment at Baptist Memorial Hospital - Tipton.

Sincerely,

Tate Moorer

Tate Moorer
Administrator

TM/vh

BAPTIST MEMORIAL HOSPITAL
UNION CITY

P.O. Box 310
Union City, Tennessee 38261

October 26, 1987

Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

HCFA mortality statistics, having been reviewed and evaluated for accuracy, have assessed one (1) error. HCFA data stated patient HIC. ID #[redacted] diagnostic category HS; date of admission 03/04/86; date of discharge 03/04/86; date of death 03/05/86. The incorrect data was the date of death, which should have been 03/04/86. Patient died within hospitalization.

Baptist Memorial Hospital - Union City is a JCAH and State of Tennessee accredited, 174-bed acute care facility which provides quality services within a rural community. There are three (3) local nursing homes established within our community which contribute to a large majority of the elderly, chronically ill and terminally ill patients admitted to our facility.

In 1986, Baptist Memorial Hospital - Union City admitted and treated 1,767 Medicare patients. According to HCFA mortality statistics provided, our facility exceeded the predicted range in "severe acute heart disease".

From an analysis performed, all twenty-eight (28) deaths that occurred were expected outcomes at the time of admission. This is due to the severity of the patient upon admission and the pre-existing cardiovascular and chronic conditions. Forty-three percent (43%) of the deaths were patients which were designated as DNR (Do Not Resuscitate) at the time of admission due to the terminal condition of the patient. Sixty-one percent (61%) of the patients died within 24 hours of admission which indicates these patients were critically ill upon admission.

A comparison was made between patients that were discharged alive and the patients which expired with "severe chronic heart disease". This comparison showed the patients discharged alive had no previous history of heart disease and no complicating secondary conditions.

It should be noted that Baptist Memorial Hospital - Union City is the only facility within a 40 (forty) mile radius with a full-time cardiologist on staff and a qualified cardiac rehabilitation program. This results in a greater treatment of patients with "severe acute heart disease" as well as "severe chronic heart disease".

As stated previously, our facility is JCAH and State of Tennessee accredited, thus requiring an extensive Quality Assurance Program and Utilization Review Management Program. All deaths are screened using criteria developed and approved by the Medical Staff which are made up of board certified physicians. Within this type of review, the hospital is able to identify the appropriateness and quality of care received and that the medical treatment was provided according to the appropriate standards of care. No quality problems have been found.

Again, cases outside the predicted range were expected and no quality problem has been identified in a thorough review of these cases.

The goal of the Board of Trustees, Administration and Medical Staff is to provide optimal quality care to all patients who seek treatment at Baptist Memorial Hospital - Union City.

Respectfully yours,

David Hogan

David C. Hogan
Hospital Administrator

DCH/vh/401

BAPTIST MEMORIAL HOSPITAL
GERMANTOWN

2100 Exeter Rd.
Germantown, Tennessee 38138

October 26, 1987

Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

Baptist Memorial Hospital Germantown is a 50 bed, non-profit, speciality hospital. The hospital is designed to handle a large volume of non emergency, short-term patients on a scheduled basis. The hospital does not have an emergency room or intensive care unit. Services in dermatology, internal medicine, laser surgery, ophthalmology, orthopedics, otolaryngology, plastic and reconstructive surgery, podiatry and urology are available. Support services include pathology, a clinical laboratory, diagnostic radiology, ultrasound and pharmacy. BMH-Germantown is one of eight regional hospitals operated by Baptist Memorial Health Care System.

Baptist Memorial Hospital - Germantown has an established ongoing Quality Assurance Program. The program is designed to evaluate patient care and identify, study and resolve inadequacies found in the patient care process. It consists of review analyses by physicians, nurses, and other appropriate professional personnel; continuous monitoring by use of objective criteria; the development of recommendations, and follow-up assessments. The program is designed to look at many quality indicators including mortality review. To date, there have been no reported mortalities at BMH-Germantown.

The goal of the Board of Trustees, Administration and Medical Staff is to provide optimal quality care to all patients who seek treatment at Baptist Memorial Hospital - Germantown.

Sincerely,

Karen Gintzig

Karen Gintzig
Administrator

KG/vh

JOSEPH M. DAWSON
ADMINISTRATOR

BLOUNT MEMORIAL HOSPITAL

MRS. CARLE (CONNIE) DAVIS
PRESIDENT OF THE BOARD

October 26, 1987

William L. Roper, M.D.
Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

The mortality data for Blount Memorial Hospital has been reviewed and the discrepancies have been identified. While it is encouraging to note that hospitals are being allowed to contribute information regarding their own mortality statistics, the overall validity of the study remains in question.

By your own admission, the data to be released can not by itself be used "to make judgments about quality of care in an individual hospital or to make comparisons among hospitals." Would it not be more appropriate to release the information to the individual hospital for review and response, in an effort to develop a more appropriate means of reporting quality of care issues?

The general public should be informed about mortality statistics and quality of care issues in a meaningful and understandable way. The current method, as stated before, will only alarm and confuse the general Medicare population.

Sincerely,

Joseph M. Dawson
Administrator

ee

COMMENTS ON THE HCFA MORTALITY DATA
BLOUNT MEMORIAL HOSPITAL
MARYVILLE, TENNESSEE

Data Verification

The data used by HCFA indicate that a total of 271 Medicare patients admitted to Blount Memorial Hospital died within 30 days of admission. Of these, 220 died while still a patient of the hospital, while 51 died after discharge. Our own records indicate that 3570 Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at other hospitals is correct. Our own records also indicate that of the 220 Medicare patients who died within 30 days of admission while still an inpatient, 47 were still alive at the time of discharge. [NOTE: the hospital should submit to HCFA a corrected copy of the patient listing clearly identifying any patients mistakenly coded as dead at the time of discharge.] It is impossible to determine the percentage of the 47 patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	44	13	45	12
CE -- Cerebrovascular Accidents	24	2	25	1
GC -- Gastrointestinal Catastrophes	5	0	5	0
GI -- Gastrointestinal Disease	8	3	8	3
GU -- Urologic Disease	7	2	7	2
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	14	1	14	1
HM -- Severe Chronic Heart Disease	19	4	19	4
HS -- Severe Acute Heart Disease	31	3	33	1
ME -- Metabolic/Electrolyte Disturbances	5	2	5	2
OP -- Orthopedic Disorders	2	1	2	1
PN -- Pulmonary Disease	25	4	25	4
RN -- Renal Disease	3	1	3	1
SE -- Sepsis	2	0	2	0
TR -- Severe Trauma	6	0	6	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	27	13	27	13
Total -- All Categories	222	49	226	45

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

LISTING OF ERRORS

PATIENT ID NUMBER (HIC)	SURNAME	DIAGNOSTIC CATEGORY	DATE OF ADMISSION	DATE OF DISCHARGE	DATE OF DEATH	HCFA DATE
[redacted]	[redacted]	CE	07/04/86	07/11/86	07/11/86	07/31/86
[redacted]	[redacted]	CA	11/01/86	11/10/86	11/10/86	11/14/86
[redacted]	[redacted]	HS	11/06/86	11/11/86	11/11/86	11/12/86
[redacted]	[redacted]	HS	03/18/86	04/10/86	04/10/86	04/11/86
[redacted]	[redacted]	HL	04/17/86	04/19/86 04/18/86	04/18/86	04/18/86

TN 25.3

BRADLEY MEMORIAL HOSPITAL
FOUNDED 19[illegible]
440024

P. O. BOX 3060
CLEVELAND, TENNESSEE 37320-3060

October 27, 1987

William L. Roper, M.D.
Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for giving our hospital a chance to respond to the statistical data which you plan to release to the media in December.

Overall, our death rate is in the low (below) median range -- which we feel reflects our excellent care. When these statistics are combined with the total patient population, our death rate falls considerably lower. However, since severity of illness, comorbidities and other contributing factors are not addressed, the statistics do not reflect a true picture.

In order for our neighbors and friends from the Cleveland-Bradley County area, surrounding counties and states to have a better view of our quality of care, we have prepared the following statements and enclosed chart.

In three categories (Ophthalmologic disease, Gynecologic disease, and Orthopedic disorders) we had no deaths so these will not be addressed. One (metabolic/electrolyte disturbance) fell below the predicted range, therefore we will not address this.

The chart will reflect our true percentages.

According to your method, we are 2% over the predicted high for the category of "severe acute heart disease". (This is the only category in your system in which we go beyond the predicted high.) There were 31 patients in this area. Five of these died after discharge -- either at home, another hospital, nursing home or other health care facility. Six of them were under age 65 and on Medicare because of disability.

Two were nursing home patients. One who had failed to respond to therapy at the nursing home was admitted here to the ICU where the patient's condition worsened in spite of treatment and the family requested there be no resuscitative efforts. The other patient had been dismissed from the hospital after an extended, complicated stay, and was readmitted two days later for a different problem and many other comorbidities.

CONTINUE

Two of these patients were transferred from area county hospitals, were unresponsive and CPR was in progress at the time of admission. Seven patients were ones whose family requested that no resuscitative efforts be made. Five were either in cardiogenic shock, respiratory distress, cardiac arrest, or were unresponsive, etc. on admission. Six required being placed on ventilators for respiratory assistance. On one patient a pacemaker was utilizied but was unsuccessful. On two of the patients, abdominal aortic aneurysms were a factor.

We believe these additional statistics show that all of these patients had multiple problems that contributed to their deaths and that acute heart condition was not solely responsible.

Also, we would like to note that there is a Medical Committee at our hospital which reviews all inpatient deaths.

Respectfully,

H. H. Kuhns, Administrator
Bradley Memorial Hospital

HOSPITAL = 440024 BRADLEY COUNTY MEMORIAL HOSPITAL Cleveland TN

TOTAL PATIENTS PER CATEGORY	MEDICARE DEATHS	DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE MEDICARE	MORTALITY RATE ALL PATIENTS	RANGE OF PREDICTED MORTALITY RATES
		ALL CAUSES	1,677	11%		8 to 15 %
350	36	CA - Cancer	126	29%	10%	19 to 38 %
114	19	CE - Cerebrovascular accidents	53	36%	17%	17 to 42 %
94	8	GC - Gastrointestinal catastrophies	42	19%	9%	9 to 34 %
367	8	GU - Urological disease	138	6%	2%	2 to 12 %
440	10	HL - Low-risk heart disease	166	6%	2%	2 to 9 %
181	15	HM - Severe chronic heart disease	70	21%	8%	13 to 34 %
154	31	HS - Severe acute heart disease	59	53%	20%	25 to 51 %
647	23	PN - Pulmonary disease	174	13%	4%	11 to 25 %
80	2	RN - Renal disease	16	13%	3%	9 to 55 %
32	3	SE - Sepsis	9	33%	9%	12 to 70 %
173	4	TR - Severe trauma	70	6%	2%	3 to 18 %

BRISTOL MEMORIAL HOSPITAL
209 Memorial Drive
Bristol, Tennessee-Virginia 37620
Phone (615) 968-1121

October 26, 1987

Hospital ID Number 440012

Mr. Harvey Brooks
Health Standards & Quality Bureau
Meadows East Building 2D2
6325 Security Boulevard
Baltimore, MD 21207

Dear Mr. Brooks:

We have reviewed the mortality statistics provided to us by HCFA and would like to provide the following comments:

> "The mortality rates experienced by Bristol Memorial Hospital are within the accepted ranges in all areas studied, with the exception of sepsis. In the area of sepsis, there were only eleven cases reviewed, making the small excess mortality shown not significant. However, because of the small number of cases, we reviewed all the deaths in this category.
>
> Our review showed that most of the patients were elderly, with multiple medical problems. All but one of them were septic when admitted to the hospital. Most came from nursing homes or were referred from other hospitals. Review of the individual charts did not reveal any deficiencies in the care provided.
>
> The statistics provided by HCFA are not intended to provide a gauge of the quality of care, but instead to point to areas to see if problems might exist in those areas. We have looked at one of these areas and found our quality of care to be excellent. We have and will continue to provide first class primary and tertiary care to the patients at Bristol Memorial Hospital."

Thank you for the opportunity for Bristol Memorial Hospital to comment on these findings.

Sincerely,

Jerry G. Moeller
Executive Vice President

jd

Clarksville Memorial Hospital
Clarksville, Tennessee 37040
(615) 647-1541

October, 1987

#440035

HOSPITAL COMMENTS ON HCFA MORTALITY DATA

Our hospital is the single rural hospital in a town of approximately 70,000 people for a service area of 125,000 people. It is a referral hospital for several outlying counties having limited access to medical care and some of which have socio-economic problems such as a high unemployment rate. These factors may cause people to delay seeking medical care.

Our hospital treats many chronic conditions, in particular, renal, pulmonary and cancer. These patients are served in our county due to the availability of dialysis center to treat chronic renal disease and a pulmonary specialist who deals with illnesses such as chronic lung disease.

We also have an in-hospital and home based Hospice Program and an oncologist which means we keep and treat many of our cancer patients until their death, rather than transferring them to a tertiary care center.

Our hospital is very committed to high quality care and its hospital-wide Quality Assurance Program. A vital part of our Quality Assurance process is the physician review of inpatient deaths by the Medical Staff. An indication of a quality problem leads to prompt investigation to see if a problem actually exists. If a problem is determined

prompt action is taken to correct the problem and follow up is done to assure that the problem does not recurr.

Our six highest mortality rates are considered "high risk" categories by HCFA. The average age of these patients is 79.5 years. These rates apply only to Medicare patients. Our mortality rate is very low in some of the "high risk" areas as well, such as strokes, severe trauma and sepsis.

In our county there are several nursing homes but few beds available for patients requiring skilled care, therefore these patients often remain in our hospital longer and may die here.

Our Hospice program care for terminally ill patients with varied diseases. During the latter part of their life these patients often have to be hospitalized and sometimes die shortly after discharge from our hospital.

These mortality data do reflect patients who died within 30 days of discharge from the hospital as well as inpatient deaths.

COMMENTS ON THE HCFA MORTALITY DATA
Cookeville General Hospital, Cookeville, Tennessee

Cookeville General Hospital submits the following comments regarding the Health Care Financing Administration (HCFA) Mortality Data.

Data Verification

Cookeville General Hospital's records indicated that 2,607 Medicare admissions occurred in 1986 versus the HCFA number of 1,580. Without detailed information concerning the billing data and the model used for computing the mortality data, it is impossible to verify the accuracy of the diagnostic or other data used in the analysis. The data used by HCFA indicate that a total of 167 Medicare patients admitted to Cookeville General Hospital expired within 30 days of admission. One hundred thirty-five were still patients of the hospital and thirty-two had been discharged.

Interpretive Remarks

In 15 of the 16 diagnostic categories listed, the hospital's actual mortality rate was well within the range of the predicted mortality rates.

Unique Services Resulting in Higher than Average Mortality

Cookeville General Hospital's service area includes roughly the fourteen counties of the Upper Cumberland (Cannon, Clay, Cumberland, Dekalb, Fentress, Jackson, Macon, Overton, Pickett, Putnam, Smith, Van Buren, Warren and White counties). This region includes many rural, low-income areas. Based on 1980 census figures, 30.2 percent of those ages 60+ living in the Upper Cumberland are considered impoverished. Statistically, lower-income families often lack in preventative health care which can result in patients being hospitalized in a more advanced stage of illness. In addition, Cookeville General

Hospital serves as a referral for many specialties (such as, urology, orthopedics, etc...) unavailable in the smaller hospitals throughout the service area.

Closing Comments

Cookeville General Hospital recognizes the need for consumers to have useful, reliable information to review regarding the quality of care available to them. HCFA mortality data should not be presented as a means in itself to define the quality of care of an institution due to the many variables involved in the computation of the data. Mortality data should be presented as a means to guide the peer review function of an institution as one part of the overall quality assurance program of that insititution.

Walter S. Fitzpatrick, Jr.
Administrator
Cookeville General Hospital

10-27-87
Date

DCGH

DECATUR COUNTY GENERAL HOSPITAL
1200 Tennessee Avenue
Box 249
Parsons, Tennessee 38363

(901) 847-3032

October 26, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

In response to the Mortality Data, we would like to report the following errors:

[redacted]	CE	075	M	Date of Death Incorrect Correct Date is 3/23/86
[redacted]	HS	072	M	Date of Death Incorrect Correct Date is 3/11/86
[redacted]	PN	079	M	Date of Admission, Discharge and Date of Death Incorrect - Admitted 1/10/87, Discharged 1/15/87, Date of Death 1/15/87
[redacted]	HS	077	M	This patient was transferred to another hospital and died at that hospital.

Attached is our reply to the Mortality Data for publication upon its release to the News Media.

Sincerely,

Larry Lindsey,
Administrator

/bm

Enc.

DECATUR COUNTY GENERAL HOSPITAL
1200 Tennessee Avenue
Box 249
Parsons, Tennessee 38363
(901) 847-3032

REPLY TO MORTALITY DATA:

Our hospital serves a rural community with a large elderly population and no available skilled nursing facility or hospice care. This causes the hospital to have a higher rate of admissions of chronically and terminally ill patients because hospital admission is the only alternative. The average age of patients in this listing is 81 years, and in the majority of the cases, death was not unexpected due to the age and stage of illness. Many times patients are admitted to the hospital for medical and nursing care during the last stage of the illness and if requested by the patient and/or family, extraordinary efforts are not carried out (NO CODE). This model considers only the diagnosis, not the severity of illness within the diagnosis. The model cannot measure the quality of care given in these cases since it is based only on statistical information and therefore death rate cannot reflect any measure of the care that was provided.

SUMMARY OF THE DIAGNOSTIC CATEGORIES

Severe Chronic Heart Disease — 28 total patients/10 deaths 36%(range 12-44%)

10 deaths/average age 84 yrs.
9 of these patients were listed in poor/critical condition on admission
6 were listed as NO CODE at the request of the patient and/or family
1 patient died after discharge - sudden cardiac arrest

Cerebrovascular Accidents — 17 total patients/5 deaths 29% (range 11-52%)

5 deaths/average age 80 yrs.
4 patients had poor prognosis at the time of admission
1 patient died at home, had been NO CODE during admission at family's request

Urologic Disease — 19 total patients/4 deaths 21% (range 3-35%)

4 deaths/average age 84 yrs.
3 patients had poor prognosis at time of admission

DECATUR COUNTY GENERAL HOSPITAL
1200 Tennessee Avenue
Box 249
Parsons, Tennessee 38363
(901) 847-3032

REPLY TO MORTALITY DATA - Page 2

Severe Acute Heart Disease — 12 total patients/5 deaths 42% (range 16-66%)

5 deaths/average age 79 yrs.

3 patients were lsited in critical condition at time of admission

1 patient was NO CODE at family's request

1 patient was transferred to another hospital and died at that hospital

Cancer — 14 total patients/6 deaths 43% (range 9-54%)

6 deaths/average age 78 yrs.

5 patients were admitted for terminal care

1 patient died at home 10 days after discharge; was terminal

Sepsis — 5 total patients/4 deaths 80% (range 6-75%)

4 deaths/average age 84 yrs.

All patients were listed in critical/guarded condition at time of admission

Pulmonary Disease — 41 total patients/8 deaths 20% (range 12-39%)

8 deaths/average age 82 yrs.

7 patients were in poor/critical condition at the time of admission

1 patient, 91 years old, died after discharge, sudden cardiac arrest

Renal Disease — 1 patient/1 death 100% (range 0-99%)

This patient was 84 yrs. old; had multiple medical diagnoses requiring 5 hospitalizations during the year.

EAST TENNESSEE BAPTIST HOSPITAL Knoxville, Tennessee 37901
BOX 1788 • BLOUNT AVENUE, SOUTHWEST • TELEPHONE 615/632-5011

October, 1987

RESPONSE TO MORTALITY STATISTICS

East Tennessee Baptist Hospital submits the following comments in response to the Mortality Statistics of Medicare patients to be made public in December, 1987. Although our actual mortality rates are well within the expected ranges, we are concerned from two significant perspectives that this information will be used to draw incomplete conclusions and to make inappropriate comparisons between area hospitals.

Our first concern is that the methodology used by HCFA is questionable. HCFA determined the range of predicted mortality rates by each diagnostic category, using a limited number of patient characteristics. We do not feel that the limited characteristics used by HCFA are necessarily the most significant factors influencing the risk of death. Furthermore, consideration is not given to a number of other factors that do have a significant impact on mortality. A few of these can include the patient's general health status, the patient's psychological condition, family support, and whether or not the disease is chronic or acute.

In addition, there is no connection between this information and the quality of care given in a specific hospital. Much more information, specific to the patient and specific to the institution involved, would have to be included in the study before such a comparison could be made.

Our second major concern is that, as a regional referral center, East Tennessee Baptist Hospital receives a disproportionately high number of seriously ill patients, whose medical needs exceed what is typically available at smaller and, perhaps, less sophisticated facilities. Consequently, any attempt to compare mortality rates without taking into consideration the complexity of care rendered is inappropriate.

With these concerns in mind, we suggest that any reader of the mortality statistics consider the following facts:

1. East Tennessee Baptist Hospital's Heart Program serves patients from all of East Tennessee. As a result of the regional nature of our program and as a result of our aggressive pattern of treatment, the typical heart patient seen at East Tennessee Baptist Hospital is extremely ill upon arrival. Simply being sent to this hospital is an indication of the fact that it is felt that the patient cannot be successfully treated in his local institution. A higher death rate is a natural accompaniment of this type of medical practice. These factors, coupled with the high volume of patients seen in our heart program (29% of cases in this study) impacts on our overall mortality rate as well.

2. Baptist Hospital's Cancer Program is also regional in nature. Most of the patients are diagnosed elsewhere and sent to East Tennessee Baptist Hospital for treatment. Much of this treatment is research oriented and not available at other facilities. In addition, much of it is used when other, more conventional, modalities are not expected to succeed. Again, a higher death rate is a natural outcome of this type of program.

"Dedicated to saving lives and restoring health through a skilled and concerned medical ministry."

3. The average age of the patients in this study is 77 years which exceeds the average life expectancy of an individual.

4. Eighty-six percent (86%) of the cases in the study were classified as either seriously or terminally ill upon admission. Thirty-five percent (35%) were not expected to survive. This resulted in a significant number of requests by patients or families that no extraordinary efforts be taken.

These four facts provide an overview of several general factors that are present at East Tennessee Baptist Hospital. There are also factors that are present within each of the diagnostic categories of this study. These have been analyzed and presented along with the specific category impacted.

DIAGNOSTIC CATEGORIES

CANCER: East Tennessee Baptist Hospital is a local and regional cancer referral center with an active Hospice Program. As a result, the typical cancer patient seen at Baptist Hospital is more seriously ill and is in need of care that is much more complex than routinely found elsewhere.

In addition, Baptist Hospital is an affiliate of the Gynecologic Oncology Group (G.O.G.). The G.O.G. is a nationwide multidisciplinary study organization trying to improve treatment for patients with gynecological malignancies by conducting research and collecting data on various treatment modalities. As a result, it is not at all unusual for patients to be sent to Baptist Hospital for treatment that is still in its experimental stages. Obviously, such steps are only taken when all other remedies have been exhausted and death is the only other alternative.

Ninety-seven percent (97%) of the patients with cancer in this study were seriously or terminally ill when admitted to the hospital. Their average age is 77.

LOW RISK HEART: Thirty-three percent (33%) of the patients in the study that were admitted in the category of Low Risk Heart were transferred from other facilities for diagnostic workup or invasive testing. Most of these were emergencies. Sixty-three percent (63%) of these patients were seriously ill with one or more complicating factors. The average age of patients in the category of Low Risk Heart is 69.

SEVERE CHRONIC HEART DISEASE: Eighty-three percent (83%) of these patients were seriously or terminally ill on admission. Forty-seven percent (47%) of the admissions were transfers from other facilities that could not provide an adequate level of care. The condition of sixty-seven percent (67%) of the patients in the study was so serious that they died within the first 48 hours of hospitalization regardless of the aggressive treatment. The average age of patients in this category is 76.

METABOLIC/ELECTROLYTE DISORDERS: Seventy-five percent (75%) of these patients were seriously or terminally ill on admission. Eighty-five percent (85%) had other serious medical problems affecting one or more body systems. The average age of patients in the category is 78.

PULMONARY: Ninety-seven percent (97%) of all admissions in this category were seriously or terminally ill, with twenty-four percent (24%) of these dying within 48 hours. Eighty-five percent (85%) of these patients had multiple system involvement. The majority of which were related to the heart and necessitated aggressive treatment for that condition at the same time as treatment for the lung.
Fifty percent (50%) of the patients in the study had requests by patients or families that no extraordinary efforts be taken. The average age of patients in this category is 77.

RENAL: One hundred percent (100%) of the patients in this category were seriously or terminally ill on admission. All patients had additional complications. Eighty percent (80%) of the patients in this category had requests by patients or families that no extraordinary efforts be taken. The average age of patients in this category is 75.

SEPSIS: Ninety-one percent (91%) of the patients in this category were seriously or terminally ill on admission. Sixty-four percent (64%) had other serious complicating conditions. The average age of patients in this category is 76.

TRAUMA: Ninety percent (90%) of the patients in this category were due to fractured hip in the advanced elderly patient with multiple chronic complicating conditions. The average age of patients in this category is 85.

UNKNOWN: Eighty-seven percent (87%) of the admissions in the category were either seriously or terminally ill on admission. The average age of patients in this category is 77.

Respectfully submitted,

Robert C. Chandler
President

David H. Waller, M.D.
Chief of Staff

EASTWOOD
HOSPITAL

October 26, 1987

William L. Roper, M.D.
Administrator
Department of Health & Human Services
Health Care Financing Administration
Washington, D.C. 20201

Dear Dr. Roper:

I have reviewed the data submitted by HCFA to Eastwood Hospital dated September 21, 1987. In developing an analysis of information provided, Eastwood Hospital falls within the acceptable ranges established by HCFA except for the diagnosis of sepsis. In your report to our hospital, HCFA indicated that Eastwood admitted 11 patients with a diagnosis of sepsis with 8 expirations representing a 73% mortality rate. The mortality range as established by HCFA is 18-72%. An analysis of sepsis diagnosis revealed that 7 of these cases were terminally ill at the time of admission and one expired within 30 days after being discharged from Eastwood.

Your report showed 929 Medicare admissions to Eastwood Hospital. During our analysis, it was determined that there were 1,561 Medicare patients admitted to Eastwood Hospital during calendar year 1986.

Further analysis revealed that there were 112 deaths at Eastwood Hospital and not 110 as reported by HCFA in its letter to us. This represents a 7% Medicare death rate.

It is requested that in your December publication that you figures be modified to agree with those which I have reported in this letter.

I will be glad to make more indepth data available to HCFA concerning discharges and deaths according to our records, if you so desire.

Sincerely,

Arthur E. Raines
Associate Executive Director

enc

3000 Getwell Road Memphis, Tennessee 38118 901/369-8100

CHATTANOOGA-HAMILTON COUNTY HOSPITAL AUTHORITY

ERLANGER
MEDICAL CENTER

975 E. Third Street
Chattanooga, Tennessee
37403
(615) 778-7000

Baroness Erlanger Hospital

T. C. Thompson
Children's Hospital
Medical Center

Willie D. Miller Eye Center

October 26, 1987

EXPRESSED MAIL

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

To The Director:

Erlanger Medical Center believes in the consumer's right to information that will enhance a person's ability to make an informed decision with respect to choosing healthcare providers. We do not, however, believe the mass release of HCFA mortality data achieves that intention, and in fact misleads the consumer.

Erlanger Medical Center believes the data may be useful for providing an indicator of a specific hospital's need to do further quality assurance review in a given area if its death rates are above those predicted for the hospital. The public and in particular Medicare patients must understand that the data cannot be used as an indicator of the quality of medical care provided or as a comparative tool for the consumer to judge different healthcare providers since the predicted mortality rates are different for every reporting hospital because hospitals do not treat the same kind and number of Medicare patients.

We note that HCFA itself acknowledges limitations in the data. HCFA admits that the five key characteristics available to it for use in

gauging mortality have not been shown to be valid predictors of mortality. Also, HCFA admits that the model has not been shown to be reliable over time. We emphasize these limitations of the HCFA data even though Erlanger Medical Center rates are at or below mid-point of the predicted mortality rates in every diagnostic category except pulmonary which is well within the range established by HCFA.

It is important to point out that the HCFA data has been accumulated from Medicare-qualified patients only and does not apply to any other patient populations, a fact that has been under-emphasized considering the planned widespread distribution of the data. Also, it should be pointed out that this data applies to 1986 Medicare admissions and is not reflective of any trend in patient care.

HCFA attributed 370 deaths to Erlanger Medical Center. We have confirmed that 310 of that number died while in the hospital. HCFA reports that 59 died within 30 days of admission to Erlanger Medical Center, but after discharge from the hospital. This is 16% of reported mortalities that HCFA alleges to have died after discharge from Erlanger but within 30 days of their admission to the hospital. We can only accept this as a non-confirmable and therefore questionable report. As there appear to be several significant errors we would encourage further review and confirmation of these deaths. We did not choose to confirm those outpatient mortalities out of respect for the families, but do know one and possibly two of those mortalities is in error:

1. A patient (HIC#[redacted]) listed in the "Pulmonary Disease" diagnostic category was discharged alive from Erlanger Medical Center on 5/21/86 and was treated in our Emergency Room 15 months later (August, 1987). This reduces the number of patients in the Pulmonary diagnostic category from 59 to 58.

2. A patient (HIC#[redacted]) listed in the "Metabolic/Electrolyte Disturbances" diagnostic category was admitted as an inpatient on 8/25/86 and died while in the hospital on 8/26/86. HCFA reports the patient died after discharge on 8/31/86. This is an error but does not effect the number of reported deaths, except to change the number of inpatient deaths from 11 to 12 for this category.

3. A patient (HIC#[redacted]) listed in the "Orthopedic Disorders" diagnostic category was admitted an an inpatient on 1/16/86 and discharged alive on 2/13/86 to a local nursing home. HCFA reports the patient was admitted on 1/16/86 and died on 2/13/86. This is an error and the number of deaths in this category should be reduced from 7 to 6 as we cannot confirm this as a death.

Due to the discrepancies found in the pulmonary and orthopedics categories the total number of Medicare beneficiary mortalities in 1986 attributed to Erlanger Medical Center should be reduced by 2. We also note that of the 370 mortalities attributed to Erlanger, 8 were admitted to the hospital in 1985. Inclusion of

these eight deaths would appear to be inconsistent with the methodology published in the Federal Registry.

Thank you for the opportunity to respond to this report prior to publication.

Sincerely,

Irvin D. Overton

Irvin Overton
Interim President

/wr

PROVIDER #4400871 - RESPONSE TO HCFA MORTALITY PUBLICATION
October 26, 1987

In reviewing the statistical information to be published in the Federal Register in December, 1987, we found no significant errors. Sevier Medical Center's death rate, as compiled by HCFA, was within the predicted range for similar patients studied across the country. It should be noted, however, that hospital performance is dependent upon a number of variables. This requires consideration of many quality indicators, of which death is only one.

Much time and effort is devoted to quality assurance activities throughout our hospital and nursing home. Each department evaluates the quality and appropriateness of care through continual monitors which are reported at regular intervals to the Quality Assurance Committee. In addition, the Medical Staff, through peer review, performs quality assurance functions which include review of all surgical and invasive diagnostic procedures, all blood transfusions, drug usage, complications, hospital-acquired infections, appropriateness of hospitalization, condition at time of discharge, deaths, and many others.

TM

SEVIER
MEDICAL
CENTER
AFFILIATE OF
FORT SANDERS
REGIONAL
MEDICAL CENTER

Middle Creek Road
Sevierville, Tennessee
37862

615/453-7111

Our institution is a rural, non-profit, 79-bed acute care hospital with an adjoining 54-bed nursing home which provides both skilled and intermediate care. We are affiliated with Fort Sanders Regional Medical Center in Knoxville, Tennessee.

The range of services at Sevier Medical Center is unusually diverse for a facility our size. Medical specialties include Family Practice, Cardiology, Emergency Medicine, Nephrology, Otolaryngology, General Surgery, Internal Medicine, Obstetrics and Gynecology, Orthopedic Surgery, Ophthalmologic Surgery, Oral Surgery, Pediatrics, Radiology, Urology and Clinical Psychology. The Medical Staff has tripled during the last six years and we are currently undergoing expansion, due primarily to the efforts of the Dr. Robert F. Thomas Foundation, established in 1984. The Foundation is dedicated to improving the quality of health services in the community and has enabled us to recently open a new Physical Therapy/Rehabilitation Unit. Future plans include a Community Health Education/Wellness Center and a new surgical wing.

The Joint Commission on Accreditation of Healthcare Organizations is a nationally recognized authority whose principal concern is quality patient care. Sevier Medical Center has been accredited by this organization since 1981.

At Sevier Medical Center we are constantly striving to upgrade services and equipment while maintaining the highest possible standards of care for our patients.

HCA Sycamore Shoals Hospital

COMMENTS ON THE HCFA MORTALITY DATA
SYCAMORE SHOALS HOSPITAL
ELIZABETHTON, TENNESSEE

DATA VERIFICATION:

The data used by the Health Care Financing Administration (HCFA) indicate that 835 Medicare patients were admitted to Sycamore Shoals Hospital in 1986, and that 141 of these Medicare patients died within 30 days of admission. Of these, 115 died while still a patient at the hospital, and 26 patients died after discharge from the hospital for some cause, whether or not the cause was related to the hospital admission. Our own records indicate that 1,240 Medicare admissions occurred in 1986. Presumably, the discrepancy in the data reflects multiple admissions of individual beneficiaries. The total number of Medicare patients treated should be the denominator in calculating any overall Medicare mortality rate, and with this adjustment, the actual mortality rate for Sycamore Shoals Hospital from all causes is 11.4% instead of the 17% indicated on the report.

INTERPRETIVE REMARKS:

We noted that the study showed that Sycamore Shoals Hospital is within the normative predicted range on each of the 15 categories of illness highlighted in the report. We also noted the very favorable mortality rates in the categories of cerebral vascular accidents or stroke, gynecologic disease, all phases of heart disease, and severe trauma.

There are several points that we would like to make regarding circumstances that are not taken into consideration in the analytic model that was used to formulate the range of predicted values. The model does not include consideration for severity of illness or for geographic differences in lifestyle. Sycamore Shoals Hospital is located in the mountainous region of Upper East Tennessee. The hospital

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A subsidiary of HCA The Healthcare Company

is a sole community provider, with a service area that is predominantly rural and economically depressed. People in this area are less inclined to seek the services of a physician when they are sick, and less inclined to consent to voluntary hospitalization than others across the nation. The model does not take this factor into consideration. The service area population is characterized by a long residency, as over 75% have lived in the area at least 20 years. In addition, more than one-third of the area residents are aged 62 years or older. These factors are supported in the study data in that the range of patients from Sycamore Shoals Hospital in the study was from 63 years old to 102 years old, with an average age of 79.1 years. It is true that many people die in the hospital, because most people go to the hospital when they are deathly ill. The study showed that 34% of the Medicare patients who died at Sycamore Shoals Hospital in 1986 died within 48 hours of admission to the hospital. This reflects a very high intensity of illness for this particular group of patients, a factor that is not taken into consideration in the analytic model that was used. For these reasons, the study seems to reflect more significantly on the norms, lifestyles, and practices of the Medicare population within the service area than on any indicator of effectiveness of hospital services.

Sycamore Shoals Hospital is fully accredited by the Joint Commission on Accreditation of Healthcare Organizations, and has an effective program of quality assurance that is monitored by the hospital's Medical Staff and the Board of Trustees. Our quality assurance activities are further supplemented in the case of Medicare patients by an independent peer review organization. Our ongoing studies, as well as the reports from the peer review organization, do not reflect any significant problems related to the care that we provide for our Medicare patients. Our confidence in the validity and soundness of our quality assurance programs in the areas of infection control, surgical case review, pharmacy and therapeutics, nutrition services, nursing services, respiratory care, laboratory, physical therapy services, emergency services, and others is reinforced by the data presented in the HCFA study.

We appreciate the opportunity to review and comment on the results of this study. However, considering the limited benefit of the data as presented, and with only a guess as to the enormous cost that must have been incurred in preparing and publishing the data, there may be some more

appropriate areas in which we might consider spending future tax dollars.

Respectfully Submitted,

Stephen C. Shepherd
Administrator

SCS:rr

Holston Valley Hospital and Medical Center

October 22, 1987

William A. Roper, M. D., Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

We appreciate the opportunity to comment, and while our mortality rates are within the range of predicted mortality rates, we nevertheless feel that we should point out that as a major referral center covering much of Upper East Tennessee and Southwest Virginia, we receive many referrals from outlying facilities.

The presence of medical and surgical specilities which are not available in the outlying facilities means that many of these patients are received in serious compromised conditions. Our facility is generally recognized for the excellence of its cardiac related programs, its pulmonary care programs, and the numerous programs in cancer care.

It should also be noted that generally there is a shortage of nursing home beds, especially skilled care beds, in the area. Our review of Medicare cases indicates that many times patients who have been long term patients in nursing homes are referred to this facility when their condition deteriorates to the point to which they cannot be cared for in the nursing home facility.

Again, we appreciate the opportunity to comment upon this review of mortality rates.

Please see the attached for additional comments.

Sincerely,

John A. Dodson
Executive Director

JAD:ec

P.O. Box 238 • Kingsport, Tennessee 37662 • 615/246-3322

HOLSTON VALLEY HOSPITAL & MEDICAL CENTER
KINGSPORT, TENNESSEE

October 22, 1987

Hospital # 440017

ADDENDUM - MORTALITY RATES

DIAGNOSTIC CATEGORY

CA (CANCER)

Our facility is a major regional referral center with specialty programs for cancer care, consequently we are referred many patients with terminal cancer.

PN (PULMONARY DISEASE)

As a major referral center adjacent to the coal mining areas of Southwest Virginia, we receive an unusual high number of patients with Chronic Old Pulmonary Disease with multiple complications, such as respiratory and renal failure and cardiac arrest, as well as chronic degenerative conditions.

There is a shortage of Nursing Home beds, especially skilled care beds.

We do agree with the statement regarding data, in themselves, as a measure of hospital performance, which was made by the American Hospital Association: "Under no circumstances should they (data) be used as the basis for judging the quality of care provided by different hospitals."

John A. Dodson
Executive Director

Humana Hospital
East Ridge

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Thank you for the opportunity to comment on the hospital specific mortality data provided to us late last month. Humana Hospital East Ridge supports the Health Care Financing Administration's desire to educate those interested in Medicare quality issues. We recognize this program is early in its development stages. While its measurements are preliminary and rough, it is clearly an example of the type of quality measurements to come.

This information is helpful in our hospital's ongoing quality assurance program that includes regular and complete review of all admissions which result in patient mortality, regular morbidity and mortality reviews, quality assurance, utilization review, as well as complete outside review by the Joint Commission on Accreditation of Health Organizations and other outside review organizations.

Since these raw numbers reflect deaths which occurred in only a limited segment of a hospital's patient population (the elderly) and are not adjusted for severity of illness or other factors which may affect patient outcome, they must be considered in that context and should serve as only one of numerous indicators used to review the quality of services provided at any individual hospital. While this statistical data is useful in this format for professional evaluation, it is not beneficial for consumer use. As a result, consumers should be informed as to the limited scope of these numbers, and be cautioned about drawing any conclusions from the data about the quality of a partiuclar hospital's services.

As in all deaths occurring in hospitals, a complete internal review is necessary to determine the appropriateness of the outcome and may provide information to physicians and other medical providers about improvements which can be made in treating future patients. Thus, the use of raw mortality statistics is helpful to professionals in identifying patient trends and treatment outcomes. Additionally, they may assist health care consumers in understanding the extensive quality control systems in place in hospitals. For these specific cases, it was determined through peer review that the medical treatment given was appropriate.

Our hospital's medical staff quality assurance committees have reviewed the data. Since some deaths occurred outside the hospital, we have been unable to compeltely validate this data. Generally, we have found it to be consistent with our hospital records. Unfortunately, in most cases the number of patients in a particular category is too small to provide a valid statistical analysis. In addition, the predicted ranges are extremely broad and have been developed in such a complex and unverifiable manner, it would be inappropriate to consider them acceptable or unacceptable "standards."

I hope this information will be helpful in attempting to refine the collection and reporting of raw hospital data. In addition, our hospital will do everything possible to assist our community in understanding how this data can best be used to improve health care services.

Sincerely,

Peter T. Petruzzi
Executive Director

PTP/tr

Humana Hospital
McFarland

October 27, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for this opportunity to comment on the hospital specific mortality data provided to us late last month. Humana Hospital-McFarland supports the Health Care Financing Administration in its desire to educate those interested in Medicare quality issues. We realize this program is in its early development stages. While the programs measurements are preliminary and rough, it is clearly an example of the type of quality measurements to come.

This information is helpful in the ongoing quality assurance in our facility. This program includes a regular and complete review of all admissions which result in patient mortality, regular morbidity and mortality reviews, quality assurance, utilization review, as well as complete outside review by the Joint Commission on Accreditation of Health Organizations and other outside review organizations.

Since these raw numbers reflect deaths which occurred in only a limited segment of a hospital's patient population (the elderly) and are not adjusted for severity of illness or other factors which may affect patient outcome, they must be considered in that context and should serve as only one of numerous indicators used to review the quality of services provided at this hospital. While this statistical data is useful for professional evaluation in this format, it is not beneficial for consumer use. As a result, consumers should be informed as to the limited scope of this data, and be cautioned about drawing any conclusions from the data about the quality of a particular hospital's services.

1961 · 25 years of Human Caring · 1986

As in all deaths occurring in hospitals, a complete internal review is necessary to determine the appropriateness of the outcome and may provide information to physicians and other medical providers about improvements which can be made in the future treatment of patients. Thus, the use of raw mortality statistics is helpful to professionals in identifying patient trends and treatment outcomes. Additionally, they may assist health care consumers in understanding the extensive quality control systems in place in hospitals.

Our hospital's medical staff has reviewed the data presented. Since some deaths occurred outside the hospital, we have been unable to completely validate this data. Generally, we have found it to be consistent with our hospital records. Unfortunately, in most cases the number of patients in a particular category is too small to provide a valid statistical analysis. In addition, the predicted ranges are extremely broad and have been developed in such a complex and unverifiable manner, it would be inappropriate to consider them acceptable or unacceptable "standards".

I hope this information will be helpful in attempting to refine the collection and reporting of raw hospital data. In addition, our hospital will do everything possible to assist our community in understanding how this data can best be used to improve health care services.

Sincerely,

William E. Sheron

William E. Sheron
Executive Director

WES:kc

726 McFarland Street
Morristown, Tennessee
37814
Telephone 615 586-2302

Humana Hospital
Morristown

October 26, 1987

William L. Roper, M.D.
Administrator
HCFA
Health Standards and
Quality Bureau
P.O. Box 22684
Baltimore, MD 21207

Re: HCFA Mortality Data
Medicare Provider No.: 044-0067

Dear Dr. Roper:

We appreciate the opportunity to review in advance the mortality data for our hospital which will be released to the public in December. Our hospital, like most in the country, maintains an ongoing quality assurance program which includes regular review of all admissions resulting in patient mortality, as well as regular morbidity and mortality reviews, and utilization review. In addition, we participate in other quality reviews by outside orgnaizations such as the Joint Commission on Accreditation of Healthcare Organizations and the Mid-South Foundation for Medical Care, the peer review organization for Tennessee.

We believe it noteworthy to point out that the data outlined in this study reflect deaths which occurred in only one segment of the hospital's patient population,.the elderly, and have not been adjusted for severity of illness or other factors which may affect patient outcome. Therefore, these statistics are not reflective of the hospital's overall mortality rates and should serve as only one of many indicators used to review quality of service provided by the hospitals in this country. Consumers should be informed as to the limited scope of these numbers, and be cautioned about drawing conclusions about the quality of a particular hospital's services from the data presentd.

We have reviewed the data for Humana Hospital Morristown and have generally found it to be consistent with our hospital records. However, since some deaths occurred outside the hospital, as much as thirty days after discharge, we have been unable to completely validate this data. Unfortunately, in most cases the number of patients in a particular category is too small to provide a valid statistical analysis. In addition, the predicted ranges are extremely broad and have been developed in such a complex and unverifiable manner, it would be inappropriate to consider them as acceptable or unacceptable "standards."

Again, thank you for providing hospitals the opportunity to review and comment on the information before it is released.

Sincerely,

Stephen L. Taylor
Executive Director

SLT/mcs

HCA Humboldt
Cedar Crest Hospital

3525 Chere Carol Road
Humboldt, Tennessee 38343
Tel. (901) 784-2321

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sirs:

Please find enclosed our comments for mortality data submitted for our review.

We appreciate having the opportunity to respond before this information is published.

Sincerely,

Rodney R. Smith
Administrator

RRS/lf

Enclosure

A Subsidiary of HCA, The Health Care Company

COMMENTS:

The governing body, management, staff, and the medical staff of Humboldt Cedar Crest Hospital consider quality patient care their prime concern.

The HCFA mortality data provided an opportunity to compare data with other hospitals in the nation. Also, a Quality Assurance study resulted from the preliminary data, that provided insight into the statistical findings. Fifty percent (50%) of Cedar Crest's census is Medicare, and there were 616 Medicare discharges in 1986. Total deaths reported by HCFA during the hospital stay or up to 30 days following hospitalization were 52.

After reviewing every case - 3 of the 52 deaths had been transferred to another acute care facility before they expired. This left a total of 49 deaths reported for 1986.

In two catagories, Cancer (CA) and Cerebrovascular Accident (CE) the hospital's acute mortality exceeded the national norm. In the CA category, the following information was revealed by chart study:

Actual deaths due to cancer	9
Expected outcome of death (No CPR written)	7
Death at home	2

In the CE Category:

Actual deaths resulting from CVA	12
Expected outcome of death (No CPR written)	7
Deaths at home	1

In this category, complications, comorbities, and the ages of the patients, made prognosis very poor.

In all other categories, Humboldt Cedar Crest Hospital remained in the lower ranges of predicted mortality rates.

Jonathan D. Grimes
Administrator

HCA Indian Path Hospital

October 19, 1987

Healthcare Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
Post Office Box 26684
Baltimore, Maryland 21207

Dear Sirs:

HCA Indian Path Hospital is pleased to have mortality information released. The data indicates that mortality is within the predicted range for all groups at our hospital. This shows and quantifies the high quality of care currently being delivered at HCA Indian Path Hospital.

Because we are within the range for all diagnostic groups, this statistically verifies the outstanding job we perform throughout our full service hospital. The data indicates a proven expertise in the areas of gastrointestinal disorders, ophthalmology, gynecological disorders, metabolic/electrolyte disturbances (primary care), and orthopedics.

Our internally generated data shows that HCA Indian Path Hospital had 3,203 Medicare admissions during 1986 and 279 deaths, yielding a mortality rate of 8.71%, which is substantially lower than the actual mortality rate shown in the HCFA data. 27 of the deaths attributed to HCA Indian Path by the HCFA data did not occur at Indian Path.

In conclusion, Indian Path is pleased to have its quality of care examined by outside agencies and reviewers because we believe the exemplary performance at our institution will be proven.

Any further questions should be directed to Ken Unger, Assistant Administrator, (615) 229-7804.

Sincerely,

Jonathan D. Grimes
Administrator

JDG:ek

2000 Brookside Road
Kingsport, Tennessee 37660
Telephone (615) 246-4311
A Subsidiary of HCA The Healthcare Company

Jackson-Madison County
General Hospital
708 West Forest • Jackson, Tennessee 38301-3956 • (901) 425-5000

HCFA (Medicare) 1986 Mortality Data
for Jackson Madison County General Hospital
Jackson, Tennessee

Medicare Provider Number - 44-0002

The HCFA Mortality rate report of the leading causes of death for Medicare patients of Jackson-Madison County General Hospital in 1986, as seen, is well within the normal range. The overall mortality rate is 11% from a predicted range of 8 to 15% for these specific diagnostic categories.

All of the mortality rates for each major category falls within the predicted ranges. The Severe Chronic Heart Disease Category is the only one to which the hospital would like to respond. The predicted range in this category is 17 to 31%. JMCGH had a 31% mortality rate in this category.

Jackson-Madison County General Hospital is the major tertiary care hospital between Nashville and Memphis. Due to its reputation as a Heart Center, most of the surrounding community hospitals are referring their most critically ill heart patients. Studies show that any hospital with a high acuity level is expected to have a higher death rate.

There was a total of 172 patients admitted to JMCGH in 1986 with the principle diagnosis of Severe Chronic Heart Disease. Forty-one of these patients had one or more additional co-morbidities (seriously complicating diseases), such as Cancer, Acute Heart Disease or Chronic Lung Disease. Fifty-three (31%) expired while they were in the hospital or within 30 days of their admission. Six died within the 30-day period but after they had been discharged from the hospital.

JESSE HOLMAN JONES HOSPITAL

509 BROWN STREET • SPRINGFIELD, TENNESSEE 37172-2984 • (615) 384-2411

NORMA G. CALHOUN
ADMINISTRATOR

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

Dear Sir:

RE: HCFA Mortality Data - Comments From Provider #44-0065

Our own records indicate that 1,622 Medicare admissions occurred in 1986 compared with HCFA's 1,012. Presumably, the discrepancy reflects multiple admissions of individual beneficiaries. We have no way of verifying whether the number of Medicare patients treated at the Jesse Holman Jones Hospital (as stated by HCFA) is correct. Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in the analysis.

The Jesse Holman Jones Hospital, which is JCAH accredited, is a 160 bed short-term, acute-care facility offering a full range of inpatient and outpatient services. Patients requiring services not offered by the Jesse Holman Jones Hospital are referred to facilities in the Nashville area. Since 1956, the Jesse Holman Jones Hospital has been serving the health care needs of citizens in Robertson County, Tennessee and portions of Cheatham County, Tennessee and Logan County, Kentucky (estimated service area of 50,000). The Jesse Holman Jones Hospital is presently a county-owned, not-for-profit facility governed by a five member board of directors. During the hospital's 31 years of operation, the governing body has been committed to serving the health care needs of the community irregardless of ability to pay. The administration, medical staff, and governing body continually strive to provide up-to-date, quality health care in an efficient manner.

The quality indication of "deaths" was included in the routine, concurrent monitoring and evaluation function of the Medical Staff Quality Assurance Committee during the HCFA data time period. This ongoing monitoring conducted by quality assurance reviewers and evaluations conducted by physicians indicate that the Jesse Holman Jones Hospital has a true commitment to a comprehensive quality assurance program. This program continues to automatically include mortality review as one of several components.

A repeat review of the patients' records in which death was included in the HCFA data of the diagnostic category "Sepsis" was conducted. This additional review revealed that 100 percent of the deaths were expected at the time of admission and discharge. The Medical Staff Quality Assurance Committee had concurrently reviewed all but one of these records. These physicians determined that standard procedures had been performed and implemented in a timely manner and that nothing could have been done differently to alter the outcome. Greater than 80 percent of the patients, and/or their families, refused any extraordinary efforts to sustain life. Every patient who legitimately fell into the Sepsis category was admitted to the Jesse Holman Jones Hospital from a nursing home.

It is important to remember that the HCFA data are not measures of hospital performance. Hospital performance can only be measured by qualified professionals, i.e. physicians, and is dependent upon many variables requiring a look at quality indicators other than mortality. Note, too, the acutal cause of death never entered in HCFA's analysis. The Jesse Holman Jones Hospital has a program in place which requires that all discharges by death be reviewed by the Medical Staff Quality Assurance Committee. The Jesse Holman Jones Hospital is committed to providing quality health care.

Respectfully submitted,

Norma G. Calhoun

Norma G. Calhoun
Administrator

NGC:pp

JOHNSON CITY
MEDICAL CENTER
HOSPITAL, INC.

400 STATE OF FRANKLIN ROAD
JOHNSON CITY, TENNESSEE 37604-6094

PHONE-615-461-6111

October 22, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Hubert H. Humphrey Building
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Dr. Roper:

The mortality data provided to us by letter dated September 21, 1987, has been reviewed by our staff. We would like to offer the following comments relative to this information prior to its publication in December, 1987.

Johnson City Medical Center Hospital, Inc. cannot acknowledge that the data used in the calculation of mortality rates is accurate. We have been able to ascertain that the information is accurate relative to those patients who expired while in this facility. We have not been able to verify the accuracy of the data relative to those patients who expired after discharge from the hospital.

Johnson City Medical Center Hospital is supportive of consumers having access to valid and useful information on the quality of hospital care. Unfortunately, the model used to detect differences in quality has never been evaluated. All patients are considered to be "average". The model does not assess the severity of illness, whether the patient was transferred from a nursing home or receiving treatment at home, whether the patient had a terminal illness, the patient's psychological state, and general health status. As a result, hospitals treating large numbers of seriously ill patients may have higher than predicted mortality rates.

The data presented is not all inclusive data. The mortality rates apply only to Medicare patients and differ from other indicators of inpatient mortality because they are calculated

using only deaths within 30 days of the last admission. The American Hospital Association and the Joint Commission are currently investigating methods of evaluating hospital quality that rely on measures other than mortality.

The most serious limitation on the model lies in its validity. While deviations from the predicted mortality rates could indicate problems with quality of care in a hospital, these deviations also could reflect the exclusion from the model of significant matters influencing the risk of death. The data presented certainly raises important questions, but it does not answer those questions.

We appreciate having had the opportunity to respond prior to publication of this data.

Sincerely,

D. Gene Clark
Administrator

emh

LaFollette Medical Center

P. O. BOX 1301 615/562-2211
LAFOLLETTE, TENNESSEE 37766

LaFollette Medical Center
LaFollette Nursing Home
LaFollette Community Home Health Care

PROVIDER # 44-0033

COMMENTS ON THE HCFA MORTALITY DATA

The data used by HCFA indicate that a total of 137 Medicare patients admitted to the LaFollette Medical Center died within 30 days of admission. Of these, 104 died while hospitalized, while 12 died at our nursing home, and 21 died after discharge or transfer to another facility (hospital or nursing home). A total of 31 patients (22%) died within 48 hours of admission. The average age of the patients who died was 79 years.

The LaFollette Medical Center, located in a rural area of Appalachia, is a 67-bed acute care hospital, 98-bed nursing home (skilled nursing facility and intermediate care facility) and home health care agency. An 150-bed nursing home (intermediate care facility) is located in the community. There were 2,754 admissions to the hospital in 1986. Of these, 1,454 were Medicare beneficiaries (52% of the total admissions).

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in HCFA's analysis.

In two of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. The two categories are cancer and pulmonary disease. Of the 12 deaths in the cancer category, three died in the nursing home, three died within 48 hours of admission, two died after transfer to a tertiary facility, one died after transfer from a tertiary care facility and three had comorbid conditions. Of the 52 deaths in the pulmonary category, 7 died in the long-term care facility, 10 died within 48 hours of admission, four died after transfer to another facility. The patients in this category had comorbid conditions and their average age was 80 years. A significant number of patients in this age category were coal miners (the predominant occupation in the community for this age category) who had black lung disease (pneumoconiosis).

MEMBER TENNESSEE & AMERICAN HOSPITAL ASSOCIATION
APPROVED BY THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS

COMMENTS ON THE HCFA MORTALITY DATA

In conclusion it is difficult to perform a meaningful review of statistics which in themselves are meaningless. The diagnostic categories in the death review are too broad. Some of the ranges of predicted mortality rates are peculiar. (The upper limit of death for cancer is given as 51% while the upper limits of deaths from gynecological disease is 100%). Nevertheless, in this facility the percentage of deaths from all admissions was 19% which was within the predicted range. As noted above the average age of the individuals who died at this hospital was 78.8 years. The cancer death rate was reported to be 60%. Clearly death from cancer is an expected event. Many of the individuals in our community are referred back for care during their terminal illness (after they have been treated by oncologists). The pulmonary disease death rate was reported to be 52%. The average death of the individuals in this category was 80 years. There is considerable concern on the part of the medical staff of LaFollette Medical Center that the statistics used in this study are unscientific. It is also the opinion of the medical staff that the use of such statistics serve little or no use for the general public. In the general statistics provided by HCFA, no age range of death is given. If one used the statistics in pulmonary disease alone, one could conclude that an individual received less than good care for pulmonary problems at this hospital. That conclusion may occur since a higher than predicted rate of mortality is occurring. Yet those individuals live to be 80 years of age suggesting they clearly were receiving good medical care.

LaFoleltte Medical Center

J. B. Wright, Administrator

Lewisburg Community Hospital

31 Ellington Parkway
P. O. Box 380
Lewisburg, Tennessee 37091
Tel. (615) 359-6241

October 27, 1987

Dr. William L. Roper
Health Standards and Quality Bureau
Mortality Rates Information
6325 Security Blvd.
Baltimore, Maryland 21207

Dear Dr. Roper:

Thank you for this opportunity to respond to the release of data on hospital mortality rates for January, 1986 through December, 1986 prior to public disclosure.

Lewisburg Community Hospital is a 119 bed acute care facility that provides care for hundreds of patients with major medical and surgical illnesses each year. The Medical Staff conducts an intensive review of the medical record of every patient who expires at this facility regarding medical management and overall care. Mortality Review and Physician Peer Review activities are an on-going process of the Quality Assurance program and an integral part of the monitoring of quality care at this hospital.

The specific mortality data reported by HCFA has been carefully reviewed by the Director of Medical Records, Director of Quality Assurance, Director of Utilization Review, and Administration. Our overall percentage and percentage within the individual categories fall well within the range of predicted mortality rates set by HCFA. While we are gratified by this external validation of our internal findings, we are ever aware that results of treatment are not only influenced by the care rendered but by the seriousness of the patient's illness and general health status.

The Medical Staff at Lewisburg Community Hospital will continue to review all mortality cases in an endeavor to identify opportunities to continue to meet and exceed quality care standards.

Again, thank you for the opportunity to present this response.

Sincerely,

Scott Kroell
Administrator

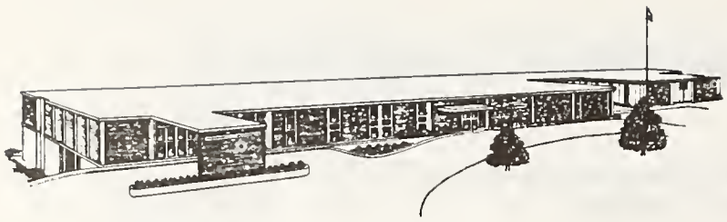
Melvin L. Lewis

Melvin Lewis, M.D.
Chief of Staff

Loudon County Memorial Hospital
Loudon, Tennessee

Provider Number: 44-0110

The hospital's comments consisted primarily of annotations to the patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish the comments because of the numerous patient identifiers contained in the data.



ROBERT P. HANNA
ADMINISTRATOR

McNAIRY COUNTY GENERAL HOSPITAL
SELMER, TENNESSEE

October 20, 1987

TO: HEALTH CARE FINANCING ADMINISTRATION

FROM: SHERRY L. MOORE, R.N., M.P.A. SLM
DIRECTOR OF QUALITY ASSURANCE AND
DRG COORDINATOR

SUBJECT: HCFA MORTALITY DATA FOR MEDICARE PATIENTS TREATED AT McNAIRY COUNTY GENERAL HOSPITAL (MEDICARE PROVIDER #440051) DURING THE CALENDAR YEAR 1986

COMMENTS

DATA VERIFICATION

The data used by HCFA indicate that a total of four hundred eighty (480) Medicare patients were admitted to McNairy County General Hospital during 1986. Of these, HCFA reported eighty-two (82) Medicare patients died within thirty (30) days of admission. Sixty-seven (67) patients died while still a patient of the hospital, while fifteen (15) died after discharge. Our own records indicate that eight hundred fifty (850) Medicare admissions occurred in 1986. Presumably the discrepancy reflects multiple admissions of individual beneficiaries to different hospitals. Our records indicate that of the eighty-two (82) Medicare patients identified, only eighty-one (81) were actually treated at our hospital. It is impossible to determine the percentage of the fourteen (14) patients dying after discharge who were in fact alive, as information concerning death after discharge is not included in the patient's medical record.

Without detailed information used by HCFA in computing the predicted mortality rate, it is not possible to verify the accuracy of the analysis.

INTERPRETIVE REMARKS

In two (2) of the diagnostic categories, the hospital's actual mortality rate falls outside the range of the predicted mortality rate. Several factors may account for this result.

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

FACTORS CREATING HIGHER THAN AVERAGE MORTALITY

1. Age of our clientale: The majority of our patients were age eighty (80) or above, which automatically places them in a high risk group.

2. Lack of skilled nursing home beds and hospice units in our service area result in many patients with chronic degenerative states to be in critical condition when admitted to the hospital and are often admitted only shortly before anticipated death.

3. The presence of comorbid conditions in most patients such as diabetes, congestive heart failure, etc., certainly adds to the risk of increased mortality.

RESULTS OF MEDICAL RECORD REVIEW

As a part of our routine Quality Assurance Activities, a review of death records occurring in our hospital is conducted on a monthly basis by the Medical Staff during their regularly scheduled meeting. The results of these reviews are documented in the Committee minutes. At McNairy County General Hospital, the quality of care is of utmost importance to the Governing Body, Administration, Medical Staff, and Hospital Staff. Any indication of a potential problem leads to prompt investigation to determine if a problem exists, and if so, action is taken immediately.

ATTACHMENT 5

McNAIRY COUNTY GENERAL HOSPITAL
SELMER, TENNESSEE

MEDICARE PROVIDER # 440051

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	9	0	9	0
CE -- Cerebrovascular Accidents	6	3	7	2
GC -- Gastrointestinal Catastrophes	0	0	0	0
GI -- Gastrointestinal Disease	3	0	3	0
GU -- Urologic Disease	1	0	1	0
GY -- Gynecologic Disease	0	0	0	0
HL -- Low Risk Heart Disease	1	0	1	0
HM -- Severe Chronic Heart Disease	7	1	7	1
HS -- Severe Acute Heart Disease	4	0	4	0
ME -- Metabolic/Electrolyte Disturbances	2	3	2	3
OP -- Orthopedic Disorders	0	0	0	0
PN -- Pulmonary Disease	20	5	19	5
RN -- Renal Disease	5	0	5	0
SE -- Sepsis	6	0	6	0
TR -- Severe Trauma	0	0	0	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	3	3	3	3
Total -- All Categories	67	15	67	14

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

TN 102.2

Medical Center of Manchester
Interstate Drive
Rt. 6, Box 6015
Manchester, Tennessee 37355

October 26, 1987

William L. Roper, M.D.
Department of Health and Human Services
Health Care Financing Administration
Baltimore, Maryland

RE: MEDICAL CENTER OF MANCHESTER
HOSP # 44-0203

Dear Doctor Roper:

We have reviewed the mortality information about Medicare patients treated in our facility in 1986 and would like to offer the following comments:

Our records indicate that in the area of severe acute heart disease (HS) there was one additional Medicare admission, making a total of five severe acute heart disease treated and four deaths. Actual mortality rate therefore would be 80%, not the reported 100% and well in the range of predicted mortality rates.(7 to 82%)

Of the five myocardial infarctions two had suffered multiple myocardial infarctions and the average age was 74.

In addition, most cancer patients in this hospital and most rural hospitals are admitted terminally for palliative treatment. Therefore, the mortality rates will likely be higher, especially when the patient sample numbers are low.

We would submit this method of reporting is a poor statistical method, especially when evaluating such small numbers as are experienced in rural hospitals. It would allow for great variation from year to year and likely represents insufficient raw data to make any determination, good or bad.

Hosp # 44-0203

The method of reporting only the last admission for a patient in a year is certainly inadequate as it would seem to penalize small facilities which assume the care of a patient with more severe illnesses.

Sincerely,

Bill B. Hollins, D.O.
Medical Center of Manchester

BBH/sv

Memorial Hospital
A DIVISION OF SISTERS OF CHARITY OF NAZARETH HEALTH CORPORATION

HSQB:ACTION
A.R. ASSOC,ADMIN,SIG,
DUE: 11/5/87
cc:ROPER,HACKBARTH,ABATO,
SOMSAK,FJONES,MPOLK

October 5, 1987

Department of Health & Human Services
Health Care Financing Administration
6325 Security Blvd.
Baltimore, Maryland 21207
Attn: William L. Roper, M.D., Administrator

Dear Dr. Roper:

Memorial Hospital of Chattanooga, Tennessee, Hospital Number 44-0091, has reviewed the mortality rate statistics you have reported.

We are pleased that our hospital is within the "range of predicted mortality rates". We suggest that the DRG system be used for reporting methodology. Why not report this information in a positive manner versus in a negative manner?

In the report that we have received, HCFA has reported on patients who expired within 30 days of discharge. Hospitals have no way of confirming this patient's death, short of contacting the family and/or friends of the deceased. HCFA cannot prove that the individuals' death was in any way connected with the previous hospital stay. Nor can hospitals consistently prove that the cause of death was not linked to the previous care delivered. This type of reporting methodology is not conducive to the working relationship that hospitals and HCFA must maintain.

The regulations regarding length-of-stay for some illnesses should be revised. Some families cannot cope with their loved one dying in the home. Consideration must be given to care of the patient. Every decision cannot be measured only in terms of cost.

I hope that you will consider our recommendations. If you have any questions concerning these remarks, please feel free to contact me.

Sincerely,

Sister Thomas de Sales

Sister Thomas de Sales
President

STDS/mh

2500 CITICO AVENUE CHATTANOOGA, TN 37404-3322 PHONE (615) 629-8100 ADMINISTRATION 629-8656

METHODIST HOSPITALS OF MEMPHIS

October 27, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26676
Baltimore, Maryland 21201

RE: Provider # 440049 Mortality Statistics

After reviewing the material submitted to us representing the analytical sample for determining the mortality rate of our institution, we wish to provide the following comments:

- We consistently review all mortality cases, Medicare and non-Medicare, and do not limit ourselves to those who died within 30 days of admission, as does this study. We have used our database as a cross check on the data you have supplied to us. While gross statistics can be used to point to areas for review one must undertake a detailed chart review to gain meaningful data.

- We are deeply concerned about the quality and appropriateness of care received by our patients and about their medical outcomes. We do not believe these mortality statistics can accurately evaluate the quality of care rendered to our patients since the statistic is based on "averages" which do not account for transfers from a nursing home, whether the patient had a terminal illness, or the patient's general health status.

- We are a tertiary referral center for a three state area which specializes in cardiovascular, cancer, and neurological treatment. Our volume of complicated cases is much higher than the average urban hospital. As stated by HCFA in the August 17, 1987 Federal Register , ..not all of the factors affecting the probability of death in a particular case, most notably severity of illness, are included in the predictive model because information on them is not readily available. **Thus, a difference between a hospital's actual and expected mortality rates cannot be construed as reflecting especially high or low quality of care.**

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

- The information supplied by HCFA for our review has significant problems with validity. The problems include the inclusion of persons who were not patients in our facility, duplicate entries, and incorrect dates for admission and discharge. The details of the problems are contained in attachments 1-4.

A summary of our findings of the problems with the database:

- 4 patients who were not our patients. 1 of the patients is listed twice.

- A total of 2 sets of duplicate entries, 1 listed above.

- Of the 136 patients HCFA stated died outside the hospital, 41 (30.1%) died in the hospital and HCFA had the wrong date of death; 4 (2.9%) were persons who were never admitted to our facility.

- There were 76 (8.4%) discrepancies between our admit and/or discharge and/or death dates as well as 2 incorrect sexes and 7 incorrect ages.

We urge those reviewing the results to bear in mind the concerns that HCFA expressed in the August 17, 1987 Federal Register:

- ..our model for predicting a particular hospital's expected mortality rate is limited by the kinds of information available to us on Medicare bills and general information on the hospital involved.

This organization is committed to providing high quality care to all those who come to us for care. We look forward to the results of efforts by the American Hospital Association, the Joint Commission and other organizations to develop with hospitals methods of evaluating hospital quality that rely on measures other than mortality rates.

Thank you for this opportunity to comment on a subject which we feel is vitally important to healthcare.

Sincerely,

Judge T. Calton

Judge T. Calton
President

attachment 1

NON MHM PATIENTS LISTED IN DATA

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : UN
AGE : 67
SEX : M
ADMIT : 11/30/86
DISCH : 12/21/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : UN
AGE : 65
SEX : F
ADMIT : 02/16/86
DISCH : 02/20/86

***DUPLICATE
SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : RN
AGE : 89
SEX : F
ADMIT : 12/05/86
DISCH : 12/08/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : RN
AGE : 89
SEX : F
ADMIT : 12/05/86
DISCH : 12/08/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : OP
AGE : 71
SEX : F
ADMIT : 01/21/86
DISCH : 01/23/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : GI
AGE : 68
SEX : F
ADMIT : 10/01/86
DISCH : 10/23/86

attachment 2

ADDITIONAL DUPLICATE DATA

SURNAME:	[redacted]	***ERROR SURNAME:	[redacted]
HIC NO.:		HIC NO.:	
DIAG	: ME	DIAG	: ME
AGE	: 94	AGE	: 94
SEX	: F	SEX	: F
ADMIT	: 04/25/86	ADMIT	: 04/25/86
DISCH	: 04/26/86	DISCH	: 04/26/86

attachment 3

CORRECTIONS TO DATA

***HCFA DATA		***CORRECTIONS	
SURNAME:	[redacted]	SURNAME:	[redacted]
HIC NO.:	[redacted]	HIC NO.:	
DIAG	: GI	DIAG	:
AGE	: 89	AGE	:
SEX	: M	SEX	: F
ADMIT	: 09/16/86	ADMIT	:
DISCH	: 09/20/86	DISCH	:
DEATH	: 09/20/86	DEATH	:
SURNAME:	[redacted]	SURNAME:	[redacted]
HIC NO.:	[redacted]	HIC NO.:	
DIAG	: HS	DIAG	:
AGE	: 77	AGE	: 87 DOB 7/28/1899
SEX	: M	SEX	:
ADMIT	: 04/26/86	ADMIT	:
DISCH	: 04/27/86	DISCH	: 04/26/86
DEATH	: 04/27/86	DEATH	: 04/26/86
SURNAME:	[redacted]	SURNAME:	[redacted]
HIC NO.:	[redacted]	HIC NO.:	
DIAG	: HS	DIAG	:
AGE	: 94	AGE	: 84 DOB 12/31/01
SEX	: F	SEX	:
ADMIT	: 08/19/86	ADMIT	:
DISCH	: 08/23/86	DISCH	:
DEATH	: 08/23/86	DEATH	:
SURNAME:	[redacted]	SURNAME:	[redacted]
HIC NO.:	[redacted]	HIC NO.:	
DIAG	: HM	DIAG	:
AGE	: 92	AGE	: 84 DOB 12/13/01
SEX	: F	SEX	:
ADMIT	: 06/02/86	ADMIT	:
DISCH	: 06/24/86	DISCH	:
DEATH	: 06/24/86	DEATH	:

attachment 3
page 2

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : HS
AGE : 74
SEX : M
ADMIT : 08/11/86
DISCH : 08/20/86
DEATH : 08/20/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : SE
AGE : 77
SEX : M
ADMIT : 10/16/86
DISCH : 10/18/86
DEATH : 10/18/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : UN
AGE : 70
SEX : F
ADMIT : 04/19/86
DISCH : 04/26/86
DEATH : 04/26/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : UN
AGE : 96
SEX : F
ADMIT : 06/20/86
DISCH : 07/20/86
DEATH : 07/20/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG : UN
AGE : 98
SEX : F
ADMIT : 06/03/86
DISCH : 06/15/86
DEATH : 06/15/86

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG :
AGE : 59 DOB 1-1-27
SEX :
ADMIT :
DISCH :
DEATH :

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG :
AGE :
SEX : F
ADMIT :
DISCH :
DEATH :

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG :
AGE : 62
SEX :
ADMIT :
DISCH :
DEATH :

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG :
AGE :104 DOB 8/10/1881
SEX :
ADMIT :
DISCH :
DEATH :

SURNAME: [redacted]
HIC NO.: [redacted]
DIAG :
AGE :106 DOB 5/24/1880
SEX :
ADMIT :
DISCH :
DEATH :

METHODIST HOSPITAL
OF MIDDLE TENNESSEE

Winchester, TN 37398
615-967-8200

Comments on the HCFA Mortality Data

The data used by HCFA indicate that a total of 97 Medicare patients admitted to Methodist Hospital of Middle Tennessee died within 30 days of admission. Of these, 78 died while still a patient of the hospital, while 19 died after discharge. It is impossible to determine whether the 19 patients dying after discharge from the hospital is accurate, since information concerning death after discharge often is not included in the patient's medical record. It is also impossible to determine whether these deaths are related to treatment of the patient while in the hospital, to treatment of the patient in another hospital, to management of the patient at home, to management in a post-acute care facility, such as a nursing home, or to a totally unexpected occurrence.

In two of the diagnostic categories, the hospital's actual mortality rate falls outside of the range of the predicted mortality rate. The actual mortality rate for the diagnostic category listed as renal disease is based on only two cases. This is an extremely small number of cases and cannot be considered statistically significant. The patients in the severe chronic heart disease category could have had an unusually large number of complications not considered in the HCFA model.

METHODIST HOSPITAL
OF MIDDLE TENNESSEE

Winchester, TN 37398
615-967-8200

Comments on the HCFA Mortality Data (Continued)

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic categories or other data used. The range of predicted mortality rates generated by HCFA assume that patients admitted to each hospital in each patient category are representative of patients overall. Therefore, the hospital has no way of knowing whether the patients admitted to its hospital in 1986 were, in fact, average patients, whether these patients had an unusually large number of complicating conditions, or whether the diagnostic categories generated by HCFA are accurate data.

METHODIST MEDICAL CENTER OF OAK RIDGE

George A. Mathews
Administrator

October 22, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Dept. of Health & Human Services
Washington, DC 20201

Subject: Mortality Data 1986

Dear Dr. Roper:

Not knowing to whom to respond I am sending this letter to you and asking that it be forwarded to the appropriate office.

We have reviewed the data furnished to us (attached) as best we can and find the following discrepancy.

Patient [redacted] HS 071 M 7/11/86 7/17/86 7/17/86 42741

and

Patient [redacted] HS 070 F 7/11/86 7/17/86 7/17/86 42741

are the same patient.

Other than protesting the process as being unnecessary, we find no other errors in record keeping.

Thank you.

Sincerely yours,

George Mathews
Administrator

GM/vb

990 OAK RIDGE TURNPIKE, OAK RIDGE, TENNESSEE 37830 TELEPHONE (615) 481-1800

The hospital's comments also included its written annotations to patient specific information provided by the Health Care Financing Administration to the hospital. We did not publish these additional comments because of the numerous patient identifiers contained in these data.

BILL BONER, MAYOR

METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

METROPOLITAN NASHVILLE GENERAL HOSPITAL
72 HERMITAGE AVENUE, NASHVILLE, TENNESSEE 37210

October 28, 1987

William L. Roper, M.D.
Administrator
Department of Human Services
Health Care Financing Administration
Washington, D.C. 20201

Re: Mortality Statistics - Provider A4-0111

Dear Dr. Roper:

We have reviewed the mortality statistics completed by HCFA for the calendar year 1986. Our comments are attached.

Sincerely,

I. E. Lowrey, Jr.
Hospital Finance Director

IEL:rlc
Attachment

Review of the Mortality Report:

1. Number of individual beneficiaries for calendar year 1986 is shown as 638, We question that count. When we reviewed 1,060 Medicare claim filings for 1986 discharges, our count shows that the number of patients returning more than once during the year was approximately 27% which indicates that the count and report should be approximately 775 with 83 deaths which gives an 11% mortality rate instead of 13%. This would cause an increase in the number of patients shown in each diagnostic category of the HCFA statistics.

2. Our hospital treats a disproportionate share of chronically ill patients due to our affiliation with a 541 bed long term care facility.

   Additionally many patients in the community with end stage diagnoses will choose to remain at home as long as possible and then be treated at General Hospital due to their financial status.

3. General Hospital is a city hospital and contracts with State facilities housing patients with many chronic medical problems. This group of patients includes many under 65 years of age, but have Medicare through their disability.

General Hospital being a hospital of "last resort" serves many patients who have low income problems and who as such frequently tend to be more noncompliant with prescribed regimens. As a city hospital, General Hospital has a very active Emergency Room/Trauma Center which receives both victims of violent crimes and accident trauma patients, whereby adding to the mortality rate.

NASHVILLE MEMORIAL HOSPITAL

Provider # 44-0006

J. D. ELLIOTT, FACHE
PRESIDENT

October 23, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P. O. Box 26684
Baltimore Maryland 21207

Dear Dr. Roper:

We are in receipt of the list of medicare patients who died in Nashville Memorial Hospital during 1986. In order to review these charts, we need the full names of the patients listed.

Is it possible to get this information?

Sincerely,

J. D. Elliott, FACHE

JDE/sbg

612 W. DUE WEST AVE., MADISON, TENNESSEE 37115 (615) 865-3433

HCA Park View Medical Center

October 13, 1987

William L. Roper, M.D., Administrator
Health Care Financing Administration
Department of Health & Human Services
Washington, DC 20201

Dear Dr. Roper:

Park View Medical Center is confident, having reviewed the mortality data for 1986 provided by HCFA, that the report reflects favorably upon the quality of care delivered in our hospital during that year. For more than 25 years, Park View Medical Center and its parent, HCA, have been dedicated to providing the highest quality of medical care which will continue in the future with or without HCFA regulations.

Despite Park View Medical Center's credible figures, there are several points that should be made relating to the mechanism of the HCFA mortality data release process in general and especially about the appropriateness of the data itself.

Under HCFA guidelines, standards for "quality" of care are interpreted and enforced by the Peer Review Organizations (PRO's) of the respective states. The contract PRO for Tennessee, the Mid-South Foundation for Medical Care, with physician direction has been steadily refining its guidelines and review procedures for the quality assurance process. By its annual mortality data release, HCFA appears to have thwarted the established state-directed PRO process by releasing the data to the public via the news media. The data should be made available through our state's PRO after pre-release and review by hospitals.

Regarding the mortality data itself, it must be stressed that the information that HCFA is releasing is quantitative and has not been validated in terms of reflecting a hospital's quality of care. In a recent analysis of quality of health care delivery by another organization, eleven variables were defined only one of which was "patient outcomes resulting in death" - i.e., mortality.

230 25th Avenue North
Nashville, Tennessee 37203
Telephone: (615) 340-1000
A Subsidiary of HCA The Healthcare Company

Thus, it becomes evident that thorough analysis of the quality of medical care demands far more than crude death rates. Thus, the most serious flaw is that the current mortality data fail to reflect the severity of illness of hospitalized patients and thereby may be very misleading to the public and subject to misinterpretation by the media.

An extreme example of misuse of mortality data would be to compare one hospital providing only elective surgery which might have a death rate of less than 0.5% and another having only patients with chronic heart failure with a mortality rate 50 times as high. That data by no means should be taken to indicate that the first hospital necessarily delivers a higher quality of care. But <u>if nothing else were known,</u> would you rather enter a hospital with a crude mortality rate of 0.5% or one with a 25% rate?

If pertinent mortality data bearing some relationship to quality of care is desired by HCFA, we urge that appropriate indicators of the illness be factored into the mortality data or at least be released simultaneously.

Respectfully submitted,

R.H. Alford, M.D.

Robert H. Alford, M.D.
Medical Director

Ernest Bacon, FACHE
Administrator

EB:ef

Donald H. Wilkerson
Administrator and Chief Executive Officer

HCA Regional Hospital of Jackson

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, D.C. 20201

Dear Dr. Roper:

Attached are our comments relative to the selected mortality data scheduled for release by HCFA in December. We have made every effort to follow your suggested format for this response. I trust the response is in order. Should you or your staff have questions feel free to contact me.

Sincerely,

Donald H. Wilkerson
Administrator and
Chief Executive Officer

ja

49 Old Hickory Boulevard E.
Jackson, Tennessee 38305
Telephone (901) 668-2100
A subsidiary of HCA The Healthcare Company

HCA Regional Hospital of Jackson

COMMENT ON HCFA MORTALITY DATA

REGIONAL HOSPITAL OF JACKSON

MEDICARE PROVIDER #440189

JACKSON, TENNESSEE

This is in response to the selected Medicare Mortality Data for Regional Hospital of Jackson as developed and released by HCFA. Based upon our review of the data, we have concern as to the accuracy and adequacy of HCFA's data. Therefore, we feel this response is necessary for readers to have a better understanding of the information.

We have discovered that the date of death and/or discharge was incorrect in at least five (5) cases reported by HCFA. Further, of twenty-four (24) deaths occurring out of our hospital, we are able to verify only six (6). Therefore, we are unable to confirm the deaths of eighteen (18) patients. Also, two (2) patients included in data on our hospital have been confirmed as having been transferred from our hospital to another acute care hospital with no further record of readmission to our facility. Accordingly, after our last contact with these patients they received hospital care at another facility prior to their deaths. We question that these deaths should be included in the statistical data for this hospital as opposed to the facility in which they were last hospitalized prior to their deaths. We also question whether these patients were counted a second time in the mortality data for the other hospital.

In one (1) of the diagnostic categories, the hospital's actual mortality rate fell outside the range of the predicted mortality rate by one (1) percent. We have carefully reviewed the medical records of the patients in this particular category and believe it is important to point out several significant factors that may affect the data and certainly its interpretation.

Of the eight (8) deaths attributed to the diagnostic category Low-Risk Heart Disease, each of the eight (8) patients were admitted to the hospital in very compromised condition with poor prognoses. The patients ranged in age from 63 to 91, with six (6) of the patients being over the age of 76. Six (6) of the eight (8) were admitted directly to the Intensive Care Unit of the hospital with two (2) of these having arrived in the Emergency Department in cardiopulmonary arrest. One (1) of these patients was admitted with Atrio-Ventricular Block and refused

49 Old Hickory Boulevard E.
Jackson, Tennessee 38305
Telephone (901) 668-2100
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insertion of a pacemaker, the insertion of which may have had a postive effect on the patient's condition. Also, one (1) of the patients admitted directly to the Intensive Care Unit received a temporary pacemaker and was then transferred to another acute care facility to have a permanent pacemaker inserted. This patient was not transferred back to our hospital. We have already raised a question with respect to the counting of this patient's death in our statistics. Of the eight (8) patients, two (2) suffered from Chronic Obstructive Pulmonary Disease (COPD), two (2) from End Stage Renal Disease (ESRD), and one (1) from both. Patients suffering from these chronic diseases are extremely ill and often require intensive medical and hospital services as did these patients. The ESRD patients are very difficult to place in nursing homes, particulary as their disease worsens. It then becomes necessary for these patients to be hospitalized in order to receive their dialysis treatments as they cannot travel to and from outpatient centers.

The HCFA statistical model does not adequately reflect the severity of the patient's illness. This is a significant weakness in the HCFA data and can lead to inaccurate conclusions being drawn from the review and comparison of the data. It is obvious from the review of the records in the one category where our hospital exceeded the predicted range of mortality by one (1) percent, that the age and severity of the patient's illness were most important factors contributing to their deaths.

This hospital and its medical staff are committed to providing quality care. The statistical data released by HCFA will be used by the hospital and medical staff in our peer review activities to assure the quality and appropriateness of care rendered in the facility. However, we recognize the significant shortcomings of the data and will keep this in mind during such review. We encourgage the readers to do likewise upon their review.

October 26, 1987

Dr. William Roper, Administrator
Health Care Financing Administration
Baltimore, MD 21207

Regional Medical Center at Memphis
Hospital ID Number - 440152

Dear Sir:

The Regional Medical Center at Memphis recognizes a primary responsiblity to assure that the care provided to our patients is of the very best quality available anywhere. We have developed sophisticated automated systems for auditing treatment provided to every person admitted. In addition, we have cooperated with the local PRO in their 100% quality assurance review of every Medicare death here in 1986. In this process, we found no pattern of adverse quality of care to explain the "higher than expected" mortality figure reported in your letter. Although this double effort failed to explain our higher death rate, it did illustrate more objectively another most relevant factor: The Regional Medical Center Medicare population is made up of large percentages of extraordinarily sick or even terminally ill patients.

On checking our records against information HCFA provided in your letter of September 21, 1987 we have determined a mortality rate for 1986 Medicare discharges of 20% compared to your 22%. Your calculated range for our predicted mortality rates was 10 to 17%. Our assumptions in reference to the significance of your mortality report is that it is predictive of one of two conditions: significant deviations could be the result of either differences among hospitals in patient treatment or differences in the types of patients admitted to a given Hospital. We conclude that our 3% deviation above HCFA's extreme predicted rate of 17% is due to a significantly sicker cohort of patients than seen in the average U.S. hospital.

Your report included a list of 237 of our patients who died within 30 days of their last admission, in the calendar year 1986. After careful analysis of our data from the hospital information system, double checked manually, our records show that for this time interval our actual number of deaths equaled 228. In examining the 44 beneficiaries on HCFAs list who died after a last discharge from this institution, we were able to confirm only 39 of the 44 and compare the causes of these deaths with hospital records. Of the 39 patients dying outside the hospital nineteen (19) final diagnoses were unrelated to the principal diagnosis on our last discharge records. Eleven (11) could not be compared, being listed as "Cardiopulmonary arrest" and only nine (9) had a related diagnosis. Further, there were six patients listed in your letter who were denied Medicare payments because they were all dead on admission. We therefore

are reducing the number by 6 to 222 inpatient deaths plus the 44 outpatient deaths for a total of 266.

Verification of the accuracy of the fraction's denominator, last admissions, was more difficult to achieve since HCFA did not include a list of this group. However, analysis of our records, excluding all but Part A accounts already paid by Medicare, shows that in calendar year 1986, our total last discharge number was 1304. Attempts made to determine if patients counted by us as last admissions were subsequently admitted to another hospital were unsuccessful due to time constraints. We think it unlikely there are many in this category since our small population of Medicare patients is a unique one by virtue of its socio-economic mix. Our patients know that this is the only hospital in our community where Medicare admissions are allowed without guarantees or prepayment of Medicare co-insurance. We, therefore, will use the 1304 figure to represent our actual number of last admissions for the year. 266 deaths and 1304 last admissions, shows a 20% mortality rate (20.3%).

The Regional Medical Center is a public teaching hospital affiliated with the College of Medicine, University of Tennessee, Memphis. It is a hospital with a regional Level I Trauma Center, a regional Burn Unit, a very large high-risk obstetrics and neonatal intensive care program and it is a hospital serving predominantly the urban, poor, under-privileged and black citizens of our community. Medicare patients represent a small percentage of our total Hospital discharges. 1986 Medicare discharges were only 6.2% of our total (1729/27,824). 1986 Medicare patients who died at this hospital showed the following characteristics: 35% of all Medicare patients who died in the institution died on the first day of admission; 98.2% were emergency admissions; 41.2% were over age 75, with another 35.5% in the 66-75 year age group (77% over 66); Number of high-risk and low-risk principal diagnoses; High-risk = 93.4%, Low-risk = 6.6%

23% were admitted directly from long-term care facilities and other hospitals (1.8%). Shelby County operates approximately 950 long term care beds. These long term care patients are hospitalized here when ill. They are also transferred to this institution when their staff considers them terminal.

69.3% were admitted directly from their homes. Our Emergency admitting physicians often state that Medicare patients coming to the hospital from their homes (69.3%) are frequently in worse condition than those being transferred from long term care facilities. They are victims of previous disease, often very poor home care, severe malnutrition, often non-compliant with medication therapy and generally a large percentage live in nearby central urban census tracts which are among the poorest in the nation. Generally there is delay in seeking hospitalization until the last minute (almost 35% of our Medicare mortality admissions die in the hospital within the first day).

Preliminary analysis of the socio-economic characteristics of census tracts where our people live reveals that 62% of those Medicare beneficiaries dying in our hospital: live in areas which have a median household income of $13,187; are part of a population that is 77% black; are part of a population where 35% have only elementary education; are part of a population where 29% of the population live below the poverty level.

Significant HCFA approved co-morbidity conditions existed as follows: 1 - 40%, 2 - 24%, 3 -7%, 4 - 6%. Review of these co-morbidity factors used as variables in calculating the predicted ranges of mortality shows: HCFA revised for purposes of this report, the approved complication co-morbidity list previously used by hospitals when they reported 1986 data; The current co-morbidity conditions required were not therefore consistently and completely available to HCFA for inclusion into the formula for deriving predicted ranges; our review of the co-morbidity diagnoses used by HCFA to compute the predictive mortality ranges reveals that HCFA did not have access to 27.6% of our patients' approved co-morbidity factors. In our four higher than predicted diagnostic categories 29.5% of the approved co-morbidity conditions were not available to HCFA, affecting 28% of all these cases.

These data omissions have therefore skewed our predictive ranges downward.

In summary, while the Regional Medical Center at Memphis will continue to utilize comprehensive Quality Assurance processes to monitor the quality and appropriateness of medical care, we believe our mortality rate to be within expected ranges considering a very sick population. We could readily and significantly reduce our mortality rate over night by developing an agreement with the two Shelby County long term care facilities to retain their terminally ill patients instead of transfering them to our hospital. Whether the ethical, medical, organizational and economic factors involved in such a decision would militate in favor of such a policy, however, remains to be explored.

Sincerely,

Gary S. Shorb
President

James S. Brown, M.D.
Medical Director

RHEA COUNTY MEDICAL CENTER

HOSPITAL • NURSING HOME • PROFESSIONAL BUILDING

HIGHWAY 27 NORTH, DAYTON, TENNESSEE 37321

PHONE 615/775-1121

BARBARA J. HEATH
ADMINISTRATOR

October 20, 1987

Department of Health and Human Services
Healthcare Financing Administration

FROM: RHEA COUNTY MEDICAL CENTER
RE: HCFA MORTALITY DATA

COMMENTARY:

Rhea County Medical Center reviewed the mortality data as furnished by HCFA and found that in most cases, the data was correct except for those items noted on worksheet #1, analysis of reporting errors.

Rhea County Medical Center would also like to have noted that most of the deaths were expected outcomes. Several were nursing home referrals, and it is worth noting that Rhea County Medical Center is the only hospital in the county with three nursing homes, one of which is physically attached to the Medical Center.

The Medical Center receives referrals from all of the nursing homes in the county and, therefore, a great percentage of the daily census is made up of elderly individuals. The average age of the Medicare patients treated at the Medical Center is 77.57 years.

RHEA CO. MEDICAL CENTER
Highway 27 North
Dayton, TN. 37321

ATTACHMENT 5

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA		Deaths Verified by Hospital*	
	In-hospital	Post-hospital	In-hospital	Post-hospital
CA -- Cancer	10	1	11	0
CE -- Cerebrovascular Accidents	6	0	6	0
GC -- Gastrointestinal Catastrophes	0	0	0	0
GI -- Gastrointestinal Disease	2	2	2	1
GU -- Urologic Disease	1	0	1	0
GY -- Gynecologic Disease	2	0	2	0
HL -- Low Risk Heart Disease	2	0	2	0
HM -- Severe Chronic Heart Disease	3	1	3	1
HS -- Severe Acute Heart Disease	8	1	8	1
ME -- Metabolic/Electrolyte Disturbances	0	0	0	0
OP -- Orthopedic Disorders	0	1	0	1
PN -- Pulmonary Disease	5	5	6	4
RN -- Renal Disease	1	0	1	0
SE -- Sepsis	1	0	1	0
TR -- Severe Trauma	0	0	0	0
OP -- Ophthalmalogic Disease	0	0	0	0
UN -- Other Diagnoses	8	3	8	3
Total -- All Categories	49	14	51	11

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

RIVERCHASE HOSPITAL

615-870-2211

632 Morrison Springs Road Chattanooga,TN 37415-3498

October 27, 1987

William L. Roper, M.D., Administrator
Department of Health & Human Services
Health Care Financing Administration
200 Independence Ave., SW
Washington, D.C. 20201

Dear Sir:

The following information concerns the mortality rates of all Medicare patients admitted or treated at Riverchase Hospital in 1986. This statistical analysis catagorizes patient deaths according to principle diagnosis not according to the cause of death.

"Riverchase Hospital admitted and treated a total of 384 patients from January through December, 1986. Thirty-one Medicare patients expired within 30 days of admission or discharge. Twenty-two patients or 5.7% out of 384 total admissions expired before being discharged. Of the remaining nine patients, seven expired in nursing homes, one at home under an independent home health contract and one at home without professional nursing care. Two of the seven who expired in nursing homes did so with a different cause of death than for which they were admitted at Riverchase Hospital.

Twenty-five of the thirty-one patients who expired within 30 days of admission exceeded the age of seventy with four of these over eighty years of age. Of these twenty-five, seven patients who were admitted for severe acute heart disease and expired were over seventy years of age. Four who were admitted for severe acute heart disease and expired were over eighty years of age.

In summary, twenty-two of a total of 384 Medicare patients expired before discharge from Riverchase Hospital. These figures reflect a 5.7% in-hospital mortality rate.

Riverchase Hospital continues in its committment to all patients, especially those in the Medicare Program, to deliver the best possible health care."

Sincerely,

Niles Floyd

Niles Floyd
Executive Director

NF/pb

5959 Park Avenue
Memphis, TN 38119-5150
Telephone: (901) 765-1000

Mailing Address:
P.O. Box 171808
Memphis, Tennessee 38187-1808

St. Francis Hospital

October 15, 1987

William L. Roper, M.D.
Administrator HCFA --Hlth Standards & Quality Bureau
DEPARTMENT OF HEALTH & HUMAN SERVICES
P. O. Box 26684
Baltimore, MD 21207

Re: SFH Mortality Information

Dear Dr. Roper:

Thank you for the information about Medicare patients treated in SFH in 1986, which we received on September 23, 1987. We also appreciate your working with Dr. Carol McCarthy of AHA on this subject during the past few months.

One of our medical record administrators has reviewed all the information pertaining to SFH patients. We are enclosing a copy of your recap page, with information arrived at from reviewing our records. You will notice that we arrive at 9.2% mortality for all causes, and your recap indicates 11%. Actual mortality rates do not agree except in instances of 0%.

Ms. Shirley Staten, our MRA, states that the number of cases and mortality rate for the diagnostic categories she has are based on the principal diagnosis the attending physician documented on the face sheet of the medical record. The implication is that the PRO changes the categories, and may pay on a different DRG than the hospital has identified.

We will probably try to reconcile some of these figures, but we did want to respond within the time you allowed. If you can add any light to this confusion, please let us know. Thank you very much.

May God always bless you.

Sincerely yours,

M. Rita Schroeder

M. Rita Schroeder
President

Encl.

Names highlighted in yellow were pts that expired within 30 days of discharge. (75)
All others were our hospital deaths.

HOSPITAL = 440155 ST FRANCIS HOSP MEMPHIS TN

DIAGNOSTIC CATEGORY	CASES	ACTUAL MORTALITY RATE	RANGE OF PREDICTED MORTALITY RATES
ALL CAUSES	4,951	11 %	8 TO 14 %
CA - CANCER	360	25 %	20 TO 35 %
CE - CEREBROVASCULAR ACCIDENTS	137	26 %	21 TO 38 %
EY - OPHTHALMOLOGIC DISEASE	97	0 %	0 TO 8 %
GC - GASTROINTESTINAL CATASTROPHES	92	20 %	10 TO 29 %
GI - GASTROINTESTINAL DISEASE	502	4 %	5 TO 5 %
GU - UROLOGIC DISEASE	278	6 %	2 TO 10 %
GY - GYNECOLOGIC DISEASE	52	0 %	0 TO 24 %
HL - LOW-RISK HEART DISEASE	457	6 %	5 TO 7 %
HM - SEVERE CHRONIC HEART DISEASE	206	27 %	17 TO 50 %
HS - SEVERE ACUTE HEART DISEASE	121	40 %	50 TO 49 %
ME - METABOLIC/ELECTROLYTE DISTURBANCES	92	10 %	11 TO 52 %
OP - ORTHOPEDIC DISORDERS	260	1 %	0 TO 4 %
PN - PULMONARY DISEASE	337	25 %	14 TO 25 %
RN - RENAL DISEASE	64	27 %	14 TO 44 %
SE - SEPSIS	18	56 %	16 TO 60 %
TR - SEVERE TRAUMA	114	18 %	4 TO 16 %

	Pts	Deaths	%
CA	660	108	16%
CE	46	12	26%
EY	131	0	0%
GC	107	13	12%
GI	770	29	3.8%
GU	402	12	3%
GY	62	0	0%
HL	1214	121	10%
HM	29	3	10%
HS	29	8	27.6%
ME	25	4	16%

	Pts	Deaths	%
OP	576	18	3.1%
PN	550	84	15%
RN	55	13	23.6%
SE	25	8	32%
TR	5	0	0%
All Causes 4186		433	9.2%
UN	3345	130	3.9%

Total Medicare Pts - 8031
Total Deaths - 563
Total % 7%

TN 134.1

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October 20, 1987

W.L. Roper, M.D.
Administrator
Health Care Financing Administration
Health Standards and Quality Bureau
Department of Health and Human Services
P.O. Box 26684
Baltimore, MD 21207

RE: St. Joseph Hospital Provider Number 440071

Dear Dr. Roper:

The data used by HCFA indicates that a total of 324 Medicare patients admitted to St. Joseph Hospital in 1986 died within 30 days of admission. Of these, 273 died while still a patient of the hospital, while 51 died after discharge. Our own records indicate that 4,852 Medicare admissions occurred in 1986 compared to 2,714 cases shown by HCFA. Presumably the discrepancy reflects multiple admissions of individual beneficiaries.

It should be noted that of the 17 categories listed by HCFA, St. Joseph only had 100 or more patients in 8 of the categories which may skew our results. The average age for the patients who died at St. Joseph was in the late 70's and early 80's. Based on an audit of our deaths, the patients had multisystem disease as well as the presence of chronic debilitating conditions.

Sincerely,

Adonna Caldwell
Adonna Caldwell
Asst. Vice President
Marketing/Health Information

AC/df

SAINT THOMAS HOSPITAL

P.O. Box 380 • 4220 Harding Road • Nashville, Tennessee 37202

Sister Juliana, D.C.
President

October 26, 1987

Dear Community:

Saint Thomas Hospital and its medical staff are gratified that the Health Care Finance Administration's report on mortality rates confirms the high quality of care we are delivering to our patients.

For nearly 90 years, Saint Thomas Hospital has been providing a high quality of care to the Nashville community and surrounding areas. In keeping with the philosophy of the Daughters of Charity, who sponsor the hospital, we provide the most sophisticated medical care in an environment that considers the physical, spiritual, and emotional needs of our patients and their families.

The Saint Thomas medical and nursing staffs, Administration and employees are all deeply committed to offering our patients the finest quality of care possible. In order to do this, Saint Thomas has developed an extensive quality assurance program to monitor our success in this area and has ongoing clinical education programs for our nurses, physicians, and other health care professionals. Our medical and nursing staffs routinely review the care of our patients to ensure that the highest standards are being met.

At Saint Thomas Hospital, we realize the importance of providing information that helps individuals make wise, educated decisions about their health. Our Good Health School and other community education programs are designed to increase the public's knowledge of health matters. We are also constantly exploring innovative ways to improve patient care.

We will continue our dedication to providing the best possible care and to finding new ways to meet the needs of those we are privileged to serve.

Sister Juliana, D.C.
Sister Juliana, D.C.
President

Clifton K. Meador
Clifton K. Meador, M.D.
Director
Medical Affairs

STONES RIVER HOSPITAL

November 2, 1987

Harvey Brook
Health Standards and Quality Bureau
2-D-2 Meadows East Building
6300 Security Building
Baltimore, Maryland 21207

re: Hospital 440200

Dear Mr. Brook:

With regards to the mortality data on our hospital, I would like to offer the following comments:

1. With regards to death rates by groupings we have found that with such a small number of total cases ie: CA=12, CE=14, HS=16, the "Actual Mortality Rate" percentage can vary significantly with only one or two deaths in those groupings. For example if there had been two more deaths in the CA grouping, the percentage would equal 67%, two less would have equaled 34%. It is obvious with small sample sizes the Actual Mortality Rate varies widely. (33% variation in this case!)

2. With regard to deaths for all causes this at least appears to be a large enough sample size to realistically evaluate. (320 cases)

3. We believe with such small sample sizes, as noted above, the data can be misleading especially as shown by examples of "investigative reporting" by certain news media. Providing poor data is worse than providing no data.

Doolittle Road
Woodbury, TN 37190-0458
P.O. Box 458
(615) 563-4001

An Affiliate of
HEALTHTRUST
INC. *The Hospital Company*

Summary: We would recommend not reporting the data by grouping to the public due to the small sample size in the groupings. Reporting total mortality rates for all cases is acceptable if the sample size is large enough.

Respectfully,

STONES RIVER HOSPITAL

Ronald Bodary

Ronald L. Bodary
Administrator

RLB/lrb

cc: Dr. William Bryant, Chief of Staff

STONES RIVER HOSPITAL

November 2, 1987

Harvey Brook
Health Standards and Quality Bureau
2-D-2 Meadows East Building
6300 Security Building
Baltimore, Maryland 21207

re: Hospital 440200

Dear Mr. Brook:

With regards to the mortality data on our hospital, I would like to offer the following comments:

1. With regards to death rates by groupings we have found that with such a small number of total cases ie: CA=12, CE=14, HS=16, the "Actual Mortality Rate" percentage can vary significantly with only one or two deaths in those groupings. For example if there had been two more deaths in the CA grouping, the percentage would equal 67%, two less would have equaled 34%. It is obvious with small sample sizes the Actual Mortality Rate varies widely. (33% variation in this case!)

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3. We believe with such small sample sizes, as noted above, the data can be misleading especially as shown by examples of "investigative reporting" by certain news media. Providing poor data is worse than providing no data.

Doolittle Road
Woodbury, TN 37190-0458
P.O. Box 458
(615) 563-4001

An Affiliate of
HEALTHTRUST INC. The Hospital Company

Summary: We would recommend not reporting the data by grouping to the public due to the small sample size in the groupings. Reporting total mortality rates for all cases is acceptable if the sample size is large enough.

Respectfully,

STONES RIVER HOSPITAL

Ronald Bodary

Ronald L. Bodary
Administrator

RLB/lrb

cc: Dr. William Bryant, Chief of Staff

Takoma Adventist Hospital

401 Takoma Avenue • Greeneville, Tennessee 37743 • Phone (615) 639-3151

Provider # 440050

Data Verification

The data used by HCFA indicate that a total of 127 Medicare patients admitted to Takoma Adventist Hospital died within 30 days of admission. Of these, 98 died while still a patient of the hospital, while 29 died after discharge. Our own records indicate that 1398 Medicare discharges occurred in 1986. Presumably the djscrepancy reflects multiple admissions of individual beneficiaries to different hospitals. We have no way of verifying whether the number of Medicare patients treated at Takoma Adventist Hospital is correct. Our own records also indicate that of the 29 Medicare patients who died within 30 days of admission while still an inpatient, none were still alive at the time of discharge. (NOTE: the hospital should submit to HCFA a corrected copy of the patient listing clearly identifying any patients mistakenly coded as dead at the time of discharge.) It is impossible to determine the percentage of the 29 patients dying after discharge who were in fact alive, as information concerning death affer discharge is not included in the patient's medical record.

Without detailed information concerning the billing data available to HCFA in computing the predicted mortality rate, it is impossible to verify the accuracy of the diagnostic or other data used in your analysis.

Interpretive Remarks

In 1 of the diagnostic categories, the hospital's actual mortality rate falls outside the range of the predicted mortality rate. After correecting the errors in the recording of deaths, the number of categories in which the actual mortality rate is outside the range of the predicted mortality rate falls to 60%. Several factors may account for this difference.

Unique Services Resulting in Higher than Average Mortality

HS - Severe Acute Heart Disease was the one category we exceeded prediction with 63% (23-58% was prediction). One of those was listed as CVA on our Mortality Log instead of Acute MI (410.9) (#410-40-8324A Shelton 6/11/86-6/19/86.) Also of interest is that the average age of these 19 patients was 79 so heart attack would be expected. If we corrected the statistics for the patient with CVA to the CE category, that would have the HS rate at 60% and CE would increase to 39%.

Peggy West, R.N., Quality Assurance Coordinator

Takoma Adventist Hospital
401 Takoma Avenue • Greeneville, Tennessee 37743 • Phone (615) 639-3151

Worksheet 1: Analysis of Reporting Errors

Diagnostic Category	Deaths Reported by HCFA In-hospital	Deaths Reported by HCFA Post-hospital	Deaths Verified by Hospital* In-hospital	Deaths Verified by Hospital* Post-hospital
CA -- Cancer	8	2	8	
CE -- Cerebrovascular Accidents	12	4	12	
GC -- Gastrointestinal Catastrophes	3	0	3	
GI -- Gastrointestinal Disease	7	1	7	
GU -- Urologic Disease	3	1	3	
GY -- Gynecologic Disease				
HL -- Low Risk Heart Disease	3	3	3	
HM -- Severe Chronic Heart Disease	7	1	7	
HS -- Severe Acute Heart Disease	19	0	19	
ME -- Metabolic/Electrolyte Disturbances	2	4	2	
OP -- Orthopedic Disorders	0	0	0	
PN -- Pulmonary Disease	17	7	17	
RN -- Renal Disease	2	1	2	
SE -- Sepsis	2	1	2	
TR -- Severe Trauma	3	1	3	
OP -- Ophthalmalogic Disease	0	0	0	
UN -- Other Diagnoses	10	3	10	
Total -- All Categories	98	29	98	

NOTES: In the Deaths reported by HCFA, tabulate the number of deaths assigned to each diagnostic category on the individual care listing. In-hospital deaths are those patients whose date of discharge is the same as the date of death; post-hospital deaths are those patients whose date of death is after the date of discharge. Verified deaths should include those patients who are known to have died or whose status 30-days after discharge from the hospital cannot be determined. Verified deaths should also exclude patients that the hospital does not believe were ever admitted to the hospital.

TN 140001

TENNESSEE CHRISTIAN
MEDICAL • CENTER

October 26, 1987

Medicare Provider #44-01-35

William L. Roper, MD
Administrator
Health Care Financing Administration
Department of Human Services
Washington, DC 20201

Dear Dr. Roper:

The issue of measuring the quality of care is clearly an important health care topic; however, the use of published data to consumers requires those of us in health care to assume added responsibility that cannot be overlooked or ignored. Some of these added responsibilities include:

1) **To use accurate data.** In review of the data provided by HCFA, Tennessee Christian found several data errors. Exhibit A is provided as an attempt to clarify the data and provide HCFA with accurate information. As you can see, Tennessee Christian's non-death cases are clearly understated in the HCFA data.

2) **To provide relevant information to consumers.** HCFA by providing this information assumes the added responsibility that the information is explained in enough detail that those reviewing the data can understand the uses and limitations of the data. Key questions include: Is mortality rates the measurement of quality? What value is the "Range of predicted mortality rates" developed? How does this data fit with JCAH evaluation? Are post-discharge deaths under the care of a hospital and are there other health care factors that should be considered in evaluating the post discharge deaths?

3) **To provide meaningful data.** The statistical significance of the "Range of Predicted Mortality Rates" appears to have several weaknesses. The most notable is that the range varies from 7% to 100% from the low to high percentage. The ranges and the actual percentages are not understood, explained nor appear relevant on several diagnostic categories.

4) **To recognize data limits.** Tennessee Christian, like many hospitals, has separate programs that have their own medicare provider numbers. At Tennessee Christian, the physical rehabilitation unit is under a separate provider number and, accordingly, no mortality figures from this unit are included in this data.

The quest for quality health care is a challenge for all providers in this industry. Many aspects are involved in the delivery of a quality of care, these should also be measured. As a physician, you are acutely aware that the practice of health care is an act and a uniqueness exists from physician to physician, as well as from patient to patient. While expected mortality rates are a limited measurement of quality, it is critical that those of us in health care determine a more meaningful measurement that relates to outcomes in a broader way than simply, "Did the consumer live through the experience?" If this is health care's view of itself, there exists a more pervasive problem.

Quality of life has significant health care implications that goes beyond the maintenance of life; this is particularly true in the current era of high-tech medicine that has developed the ability to maintain life for beyond our ability of a decade ago.

Your responsibility in this area is great and your efforts to develop meaningful data as part of the overall financing responsibility of HCFA and the Department of Health and Human Services are needed.

Respectfully submitted,

Terry Owen

Terry Owen, Vice President
Marketing and Business Development

TO/cs25

Exhibit A

MEDICARE MORTALITY INFORMATION
10/23/87

The following information is based on our analysis of indeces which were reviewed for 1986 using the basic ICD-9-CM codes (430-432, 434, 436).

In reviewing, all patients were eliminated who had subsequent admissions. The patients identified in this report indicate their last admission for 1986 at Tennessee Christian Medical Center.

HIC #	SURNAME	DX CAT	AGE	SEX	ADM	DISC	DEATH	PDX
[redacted]		CE	075	M	9/12/86	9/22/86	9/22/86	436
		CE	080	M	7/18/86	7/19/86	7/19/86	436
		CE	072	M	4/06/86	4/23/86	4/23/86	436
		CE	081	F	5/18/86	5/19/86	5/19/86	430
		CE	092	F	12/07/86	12/09/86	12/09/86	436
		CE	062	F	1/14/86	1/31/86	1/31/86	431
		CE	043	M	8/19/86	8/21/86	8/21/86	436
		CE	082	M	1/23/86	1/28/86	1/28/86	436
		CE	085	F	2/22/86	3/02/86	3/02/86	436
		CE	074	F	4/16/86	4/20/86	4/20/86	436
		CE	074	M	11/23/86	11/23/86	11/23/86	431
		CE	087	F	1/22/86	2/18/86	2/18/86	436
		CE	079	F	11/21/86	12/2/86	12/2/86	431

With the exception of [redacted] all above patients expired in the hospital.

The following patient expired in the hospital but was not included in the above list sent from HCFA.

[redacted]	[redacted]	CE	076	F	11/18/86	11/18/86	434

HCFA reported that TCMC had 24 cases in diagnostic category CE which included 13 deaths and 11 non deaths. Upon review we have the 14 listed above plus 16 nondeaths listed below:

HIC#	SURNAME	DX CAT	AGE	SEX	ADM	DISC	PDX
[redacted]		CE	075	M		8/27/86	434
		CE	087	F		9/30/86	434
		CE	059	M		9/19/86	434
		CE	077	M		8/15/86	436
		CE	074	M		8/19/86	436
		CE	068	M		9/21/86	436
		CE	083	M		7/03/86	436
		CE	072	F		9/12/86	436
		CE	064	F		9/30/86	436
		CE	083	F		6/14/86	434

CE	086	F	1/31/86	436
CE	070	F	1/25/86	436
CE	085	F	6/10/86	436
CE	067	M	4/02/86	436
CE	093	F	6/10/86	436
CE	072	F	4/25/86	436

CORRECTED % are as follows:

HCFA statistics = 24 cases with 13 deaths giving mortality rate of 54%

TCMC statistics = 30 cases with 14 deaths giving mortality rate of 46.6%

THE UNIVERSITY OF TENNESSEE MEDICAL CENTER

William F. Bowld Hospital

October 25, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Bos 26684
Baltimore, Maryland 21207

Dr. Roper:

The William F. Bowld Hospital is an acute care specialty hospital, which treats high acuity patients including renal, liver, and cardiac transplant recipients.

All intra-hospital deaths are reviewed in depth by a Registered Nurse, discussed in Committee for problems in quality of care and/or utilization of services, and referred to a physician when appropriate.

We have reviewed the mortality information which you forwarded to us, and have validated the accuracy of the data. We do not have any additional information that would change substantially the data submitted for our review.

Sincerely,

Jane Bondani

Jane Bondani, R.N., M.S.N.
Director, Medical Information System

951 Court Avenue Memphis, Tennessee 38103 901-577-4000

THE UNIVERSITY OF TENNESSEE
MEDICAL CENTER AT KNOXVILLE

1924 Alcoa Highway
Knoxville 37920-6999
(615) 544-9000

October 26, 1987

William L. Roper, M.D.
Administrator
Health Care Financing Administration
Department of Health and Human Services
Washington, DC 20201

Dear Dr. Roper:

We have examined the selected mortality data about Medicare patients treated at the University of Tennessee Memorial Hospital in 1986 (Medicare Provider No. 0440015).

Every hospital has an intense interest in the quality of care and uses many process and outcome studies to measure that quality. While the validity of the methodology is yet to be proven, the HCFA studies of the actual mortality compared to a predicted mortality may give a hospital another way to assess its health care delivery.

Since the reporting made it difficult to ascertain without question the patients used as the denominator in the calculation of the actual mortality rate, we chose to examine only the category - "HS-severe acute heart disease".

From January to December 1986, we discharged 195 Medicare patients with the ICD-9-CM codes within this category, of whom 30 were re-admissions. We verified that the fifty-three in-hospital deaths recorded were correct. We did not verify the correctness or cause of death of the three who died after leaving the hospital. Our adjusted hospital death rate is 32% (53/165), compared to 44% (56/128) from the HCFA data.

Sincerely,

Gene Hall
Administrator

VANDERBILT UNIVERSITY

NASHVILLE, TENNESSEE 37232 TELEPHONE (615) 322-5000

Vice-Chancellor for Health Affairs • Direct phone 322-2151

Medicare provider #: 440039
October 23, 1987

Health Care Financing Administration
Health Standards and Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, MD 21207

This letter is being sent in response to the Health Care Financing Administration's (HCFA) release of 1986 mortality data for Vanderbilt University Hospital (VUH). We were pleased to note that the overall mortality rate for VUH was very favorable and fell at the lower end of our predicted range. The actual mortality rates for fourteen of the sixteen selected high and low risk diagnostic categories were in the lower half of the predicted mortality range. Despite our overall high performance, we have serious concerns about the adequacy of the model used by HCFA to appropriately adjust casemix severity at major teaching and referral hospitals.

HCFA's stated purpose in publishing hospital mortality statistics as part of a quality review initiative is to provide consumers with information which will allow them to make better health care choices. We believe that the data, as currently reported, may be counter productive to this objective, and, in fact, may cause patients to make erroneous decisions.

The predicted mortality range for each hospital is determined, in part, by the estimated severity of illness of patients admitted to each hospital. This estimated severity is obtained from HCFA's payment claims data. Our major concern is that these claims data badly underestimate the severity of illness of many of the most desperately ill patients who are referred to VUH for highly specialized care not available at other hospitals in our region. The Association of American Medical Colleges has designated VUH as one of only 122 major teaching and referral hospitals in the nation. Our burn center is fully rated by the American Burn Association and our trauma center is one of the most advanced in the country. Our comprehensive cancer referral center treats many critically ill and end-stage cancer patients. Coronary artery bypass surgery is performed at VUH, a service offered by only 10 percent of U.S. hospitals.

As a result of being one of only a few hospitals providing these services, VUH treats a disproportionate share of the most critically ill patients within most diagnostic categories. The current method of estimating severity of illness groups patients on primary diagnosis and does not

adequately reflect the severity of many underlying conditions. An example of such a situation involves patients admitted with a primary diagnosis of diarrhea. Patients with diarrhea would be classified as low risk gastrointestinal patients. However, if the underlying cause of their diarrhea was advanced cancer, their risk of death would be much greater than for other patients with the same primary diagnosis. As a comprehensive cancer referral center, the proportion of patients admitted for diarrhea who have advanced cancer will be much higher than at most other hospitals. Thus, as a group, patients admitted to VUH with a primary diagnosis of diarrhea would have a poorer prognosis than those admitted to other hospitals. Grouping these patients with "low risk" gastrointestinal patients is misleading.

HCFA's analysis attempts to consider all hospitals, regardless of detailed patient characteristics, on the same basis. To do so, HCFA assumes each hospital admits an "average" mix of patients and then they adjust for up to four specific underlying or coexisting conditions. While this is a good first-cut at the problem, many more conditions need to be taken into account. The result is a systematic bias against hospitals such as VUH which routinely treat patients who are the most severely ill in a particular diagnostic category.

A review of our severe trauma deaths revealed that 45 percent (five out of 11) were admitted to the Vanderbilt University Hospital Trauma Center. Four of the above 11 patients had documented third degree burns over 28 to 54 percent of their total body surface; three had burns on more than 40 percent of their total body surface. Two of the burn patients had sustained documented inhalation injuries in addition to external burns on more than 50 percent of their total body surface. Two burn patients and four of the seven non-burn patients were transferred to VUH from other acute care hospital emergency rooms unable to treat their condition. One of the patients was "clinically brain dead" on admission.

These trauma cases do not represent typical trauma cases at the 6,000 hospitals under evaluation; rather, they represent a selected group of the most serious cases. Even under the most ideal conditions, the prognosis for such patients is not favorable.

A major risk factor for trauma patients is the presence of shock (no palpable pulse or heartbeat) at admission. In reviewing the medical records of severe trauma patients at VUH, many patients who were transferred from other hospitals

presented in shock. However, this condition was not used in the HCFA analysis.

A similar review of deaths due to conditions classified as "low risk heart disease" showed that 54 percent (seven out of 13) had coronary artery bypass surgery on three or more coronary arteries. One of these patients had severe atherosclerosis which resulted in the need for a second bypass operation after undergoing a four vessel bypass in 1979.

Sixty-two percent (eight out of 13) of the low risk heart disease patients were admitted to VUH as transfers from other acute care hospitals. One such patient was transferred with a punctured vessel as a result of a cardiac catheterization performed at another hospital. Two transfer patients were admitted with severe three vessel disease, a condition which presents high risks. One of these patients underwent coronary bypass surgery and the other had an intraaortic balloon insertion. Another transfer patient was admitted with ventricular tachycardia, a heart condition often associated with sudden death.

Once again, these were seriously ill patients, many of whom had open heart surgery. Such patients are not characteristic of the average "low risk heart disease" patient across the country.

In summary, while the HCFA analysis presented is a reasonable "first step" in addressing the issue of quality care, it is important to emphasize that the current model seriously underestimates the severity of underlying conditions of patients treated at major teaching hospitals and referral centers. As such, the results cannot be interpreted as comparative measures of hospital performance or quality of care. Patients with heart conditions, severe trauma, advanced cancer, or severe burns may actually be harmed if they were to choose a hospital not fully capable of treating their condition. The bias against specialized centers needs to be corrected if the published results are to have their intended effect.

Sincerely yours,

Fred V. Lucas M.D.

Fred V. Lucas, M.D.
Associate Vice-Chancellor
for Health Affairs

FVL:glc

HCA Volunteer General Hospital

October 22, 1987

Health Care Financing Administration
Health Standards & Quality Bureau
Hospital Mortality Information
P.O. Box 26684
Baltimore, Maryland 21207

RE: Volunteer General Hospital - 440061

Dear Sir:

We have reviewed the actual mortality rate data that you provided for our hospital and found only the following discrepancies:

Pt. ID No.	Hosp. No.	Date of D/C	Date of Death
[redacted]	19974	12-14-86	12-14-86
[redacted]	19189	9-04-86	9-04-86

We have reviewed the mortality information based upon the sixteen diagnostic categories and did not feel that there were any cases that were not properly handled. In reviewing the severe acute heart disease, which our mortality rate fell above the predicted mortality rates, we looked at an in-depth study for this diagnostic category as well as severe chronic heart disease and the low-risk heart disease and came up with the following.

1. The average age of these patients was 79 years.

2. No Codes were written by the physician on 33% of the patients at the time of admission.

3. No Codes were written by the physician after admission on 33% of these cases.

4. Six percent (6%) of these cases were DOA.

5. Thirty-four percent (34%) of these patients died on the day of admission.

6. Fifty-three percent (53%) of these cases had previous admissions within one year.

161 Mount Pelia Road
P.O. Box 967
Martin, Tennessee 38237
Telephone (901) 587-4261
A subsidiary of HCA The Healthcare Company

7. Twenty-eight percent (28%) of the admissions were were from Nursing Homes.

8. Seventy-two percent (72%) of the admissions had previous history of heart disease (i.e., ASHD, angina, MI, and CHF).

In reviewing the mortality data for all of the diagnostic categories with the Utilization Review/DRG Coordinator, I feel that we have a process that reviews deaths on an ongoing basis in the Utilization Review Committee. It is also submitted through the hospital's Quality Assurance Program, which is reviewed by the Medical Staff and the Board of Trustees.

The style of behavior in many rural hospitals, just like our community, is that the family wants their loved ones who are chronically ill to be taken care of at home and really brought to the hospital to die.

Please contact me if there is any additional information or clarification we can provide you regarding our hospital's cases.

Sincerely,

Joe D. DePew
Administrator

JDD/cpd

Wayne County General Hospital

Post Office Box 580
Waynesboro, Tennessee 38485
615-722-5411

A National Healthcare Affiliate

M E M O R A N D U M

TO: Health Care Financing Administration

FROM: Dan Miller, Administrator

SUBJECT: Mortality Rates

DATE: October 9, 1987

I have received the mortality rates for Wayne County Hospital, and after reviewing these I found that we were within the predicted range in all categories with the exception of Gastrointestinal Disease, and this was only two points above. I do not feel that we have a problem with the rates which will be disclosed in December.

Releasing mortality rates can give a misleading picture of the quality of services provided at an institution. These rates are based on the data of patients who expired within one year of an admission to your hospital. In most instances deaths computed in this manner have no relation with the reason the patient was hospitalized at a particular institution.

This type of statistical analysis can do no more than identify potential areas for further evaluation, and I see no benefit from this type of disclosure.

Williamson
Medical Center

Ronald G. Joyner Chief Executive Officer
P.O. Box 1600 • Franklin, TN 37065-1600 • (615) 791-2151

October 21, 1987

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

William L. Roper, M.D.
Administrator
Health Care Financing Administration
P.O. Box 26684
Baltimore, Maryland 21207

RE: COMMENTS REGARDING MEDICARE
HOSPITAL MORTALITY RATES: 1986
Williamson Medical Center
Medicare Provider No. 440029

Dear Dr. Roper:

Upon review of the mortality information about Medicare patients discharged from Williamson Medical Center in 1986, I have the following corrections:

1. Patient I.D. Number [redacted] Date of Discharge should have been 11-24-86 as patient expired following a readmission on 11-15-86.

2. Patient I.D. Number [redacted] Patient was not discharged on 10-31-86 but expired in the hospital on 11-1-86.

3. Patient I.D. Number [redacted] This is a duplicate listing of this patient's death. Patient did not expire on this admission, rather expired following admission correctly listed as Patient I.D. Number [redacted] To reiterate, patient did not expire during [redacted]dmission but expired on admission 414122879B.

The remainder of the data appears to be correct within the limitations of our ability to verify all of the information listed.

Sincerely,

Ronald G. Joyner
Executive Vice-President and
Chief Executive Officer

RGJ:rls

Enclosure

Wayne County General Hospital

Post Office Box 580
Waynesboro, Tennessee 38485
615-722-5411

A National Healthcare Affiliate

M E M O R A N D U M

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FROM: Dan Miller, Administrator

SUBJECT: Mortality Rates

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Williamson Medical Center

Ronald G. Joyner Chief Executive Officer
P.O. Box 1600 • Franklin, TN 37065-1600 • (615) 791-2151

October 21, 1987

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RETURN RECEIPT REQUESTED

William L. Roper, M.D.
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Health Care Financing Administration
P.O. Box 26684
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Williamson Medical Center
Medicare Provider No. 440029

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Sincerely,

Ronald G. Joyner
Executive Vice-President and
Chief Executive Officer

RGJ:rls

Enclosure

TECHNICAL APPENDIX

METHODOLOGY

The Data Base

The basis for the present analyses is the MEDPAR file assembled and updated quarterly by the Bureau of Data Management and Strategy in HCFA. This file is constructed from information on hospitalizations submitted to HCFA by hospitals through fiscal intermediaries and from data obtained from the Social Security Administration describing certain characteristics of the patients including age, sex, race and the date of death. Because each Medicare beneficiary is assigned a unique health insurance claim number (HIC), it is possible to link hospitalizations longitudinally to ascertain prior and readmissions, and the date of death whenever and wherever it occurred.

The process of data management consisted of the following steps:

(1) admissions to acute-care hospitals were selected, as was the array of data needed to characterize the patient and the hospitalization;

(2) the first- and last-occurring hospitalizations, their nature as out- or in-transfers, and the number of admissions prior to the last of a given patient in a given calendar year were identified,

(3) patients were assigned to major diagnostic categories by means of the principal diagnoses, their additional diseases identified on the basis of the secondary diagnoses, of which there were up to four for each hospitalization, and separate files were written for each diagnostic category for the first- and last-occuring hospitalization respectively. Analyses were performed on the separate files. For the purpose of assessing overall mortality rates, results obtained for the individual diagnostic categories were aggregated. As a check on the programming, a summary file of the hospital-level data was also written and analyses of this summary file were compared with the results of aggregation of the files for the diagnostic categories.

In this project, the basis used for the assessment of mortality rates was death within 30 days of admission. However, because readmissions can occur within the interval between admission and 30 days thereafter, to avoid multiple counts of deaths, the last-occurring admission in a calendar year was chosen because it is associated with the highest risk of death. The prior experience of the patient was taken into account by identifying whether the last-occurring admission represents a transfer from another acute care facility and by identifying the overall number of prior hospitalizations in the year.

The composition of the diagnostic categories and of the comorbidities was determined in part empirically and in part on the basis of clinical judgment. The diagnostic categories used in these analyses were chosen to follow medical disciplinary lines and to report principally on high-risk admissions but also on certain low-risk admissions. The empirical testing consisted of the computation of the relative risk of death associated with the category or comoribidity compared to that isn a reference population by using standard statistical techniques (The Cox Proportional Hazards Model). A committee of clinical advisors was assembled to review alternatives and to assist in the design of an appropriate classification scheme. The approach adopted for the present analyses is the result of their deliberations and advice.

A list of the ICD9-CM codes included in each diagnostic category and comorbidity is found on the following pages.

Analytic Techniques

The principal analytical tool was logistic regression. Because the diagnostic categories are mutually exclusive, the analyses to ascertain the influence of patient characteristics (age group, sex, comorbidities, prior admissions and transfer status) were carried out separately for each category. If p is the probability of a given patient dying within 30 days of admission, its dependence on the patient's characteristics x_i (covariates) is specified by the logistic model as

$$\log \frac{p}{1-p} = \Sigma_i b_i^* x_i .$$

Once the coefficients b_i have been computed, it is possible to estimate the predicted probability of dying for that patient, and, by averaging over all the patients whose treatment in a given hospital is being evaluated, the predicted mortality rate for that hospital for the individual diagnostic category as well for all categories taken together.

The second quantity required of the analyses was an estimate of the uncertainty in the mortality rate expressed as a range of predicted rates encompassing a specified proportion (95%) of the probable values. For this it is necessary to compute the variance of the probability of death at a given hospital. This quantity is conventionally taken to consist of the sampling variance and of the variance due to the uncertainty in the estimates of the regression coefficients. The latter, given the very large populations used to estimate the coefficients, is negligible compared to the former, and was confirmed to be so by direct calculation.

	DIAGNOSIS	ICD-9-CM CODES*
High Risk		
CA	Cancer	141-160, 162-172, 174-209
CE	Stroke	430-432, 434, 436
HS	Severe acute heart disease	410, 427.1, 427.4, 427.5, 441.0, 441.1, 441.3, 441.5, 441.9, 785.51
HM	Severe chronic heart disease	398.91, 402.01, 402.11, 402.91, 425, 428, 518.4
GC	Gastrointestinal catastrophes	551, 557, 560.0, 560.2-560.9, 570, 572-572.7, 573.4, 567, 578.0, 578.9
ME	Metabolic and electrolyte disorders	250.01-250.4, 251.0, 251.1, 255.4, 276
PN	Pulmonary disease	415.1, 416.0, 480-483, 485-516, 518-519, except 516.1, and 518.4
RN	Renal disease	580-590 except 580.81 and 590.81
SE	Sepsis	DRG: 416, 417
TR	Severe trauma	806, 808.43, 808.53, 820, 821, 828, 850.2, 850.4, 851.1-851.7, 852, 839.0-839.5, 860-867, 887, 897, 900.0, 901-904, 926, 927.0, 928.0, 929.0, 942.3, 942.4, 942.5, 946.3-946.9, 947.1-947.9, 948.2-948.9, 952, 958.0, 958.1, 958.4, 958.5
Low Risk		
EY	Ophthalmologic disease	360-379
GY	Gynecologic disease	617-629
HL	Low risk heart disease	393-429, except 415.1 and 416.0 and cases in categories HS and HM
GI	Gastrointestinal disease	530-579, except 577.0, 573.1 and 573.2 and cases in category GC
GU	Urologic disease	593-609
OP	Orthopedic conditions	712-739, 810-838, 840-848 (excluding cases in category TR)
UN	All other Conditions	All other ICD 9 CM Codes

*All of the above entries refer to ICD-9-CM codes except for the entries for Sepsis which are expressed in terms of Diagnosis Related Groups (DRGs).

COMORBIDITY	ICD-9-CM CODES
Cancer	141-160.9, 162-172.9, 174-208.9
Chronic liver disease	571-572.8
Chronic renal disease	582-583.9, 585-587
Chronic cardiovascular disease	412-414.9, 426-429.1
Chronic pulmonary disease	491-493.9, 496
Cerebrovascular degeneration/ chronic psychosis	290-290.9, 294-299.9
Hypertensive disease	402-405.99, 412-414.9
Diabetes	250.01, 250.1-250.9

(A comorbidity is taken to be present if its ICD-9-CM code appears on the bill as any one of the up to four addtional diagnoses beyond the principal diagnosis.)

The sampling variance for the computation of the range of predicted mortality rates is approximately estimated by

$$[P * (1-P)]/N$$

where P is the proportion who had died of persons at risk, N, within a specified diagnostic category (or overall).

The (negligible) component of variance of the overall mortality rate, due to the regression coefficients is estimated approximately by

$$\Sigma_i[\Sigma_k\Sigma_{k'}p_{ijk}*(1-p_{ijk})*p_{ijk'}*(1-p_{ijk'})*x_{ijk}*C(b_i)*x_{ijk'}]$$

where the subscripts k and k' refer to individual patients, i to the diagnostic category, and j identifies the hospital. However, given the potential systematic differences among hospitals in the severity of illness of their patients, in the quality of care they receive and other unidentified factors, a further contribution to the variance, the interhospital variance, must be considered. This constant term is estimated by

$$IHV = \Sigma_j(P_j-\bar{P})^2*(N_j/N_t)*(1-1/N_j)$$

where P_j is the predicted mortality rate, N_j the number of cases at risk at hospital j, N_t the total number of cases at risk, and $\bar{P}$ the average mortality rate, in the category under consideration. In computations using standardized residuals, the sampling variance was based on the observed mortality rate. The difficulty engendered by the occurrence of a zero mortality rate in some hospitals was overcome by a Bayesian approximation in which the mortality rate, D/N, was replaced by (D+1)/(N+2), where D is the number of persons who died and N is the number at risk.

The ranges of predicted mortality rates given in this publication encompass 95% of the probable values on a logit scale to ensure that the range neither goes below zero nor above 100%. On the logit scale, the range of predicted values, P, is given by

$$R = \log \frac{P}{1-P} \pm 1.96 \frac{\sqrt{[P*(1-P)/N + IHV]}}{P*(1-P)}$$

Retransformed to the linear scale, the upper end of the range is

$$\exp(R_+)/(1+\exp(R_+))$$

and the lower end of the range is

$$\exp(R_-)/\exp(1+R_-)$$

where R_+ is the value of R taken with the (+) sign and R_- is the value of R taken with the (-) sign.

Two subsidiary analytical approaches were employed both as checks of the programming and the computational algorithms, and as validation tools. One was multiple linear regression in which the unit of observation was the hospital, the dependent variable the proportion of persons at risk who had died, and the independent variables within the specific diagnostic categories the proportions of the persons at risk within given characteristics used in the logistic regression. Thus, a direct comparison of the results of the logistic and the linear models was made in the case of the specific diagnostic categories. However, whereas in the computations based on logistic regression results for overall mortality were simply obtained by aggregation of the specific categories (including "Other"), in multiple linear regression analysis of this quantity, the diagnostic categories were used as covariates, along with the other patient characteristics.

The other alternative approach consisted of indirect standardization of mortality rates. The population at risk in each diagnostic category was subdivided by age-group and sex into cells within which average mortality rates were calculated. These rates were then used to compute predicted mortality rates for the age and sex-mix of each hospital.

In addition to the above, cross-validation and boot-strap analysis were used to explore the properties of the models in selected diagnostic categories. In cross-validation, the entire population at risk is randomly divided into two equal subsets and regression analyses are performed on each subset. Predicted mortality rates for the hospitals are computed both directly within each subset and by use of the patient characteristic of a given subset and the coefficients obtained in the other subset. This approach essentially tests the reproducibility of the estimation of the regression coefficients. In boot-strap analysis, replicate populations are constructed by sampling with replacement from each hospital's population. These replicate populations are of equal size but differ from each other in case-mix. Regression analyses are then performed independently on each boot-strap replicate.

Rank-order (Spearman) correlation coefficients of standardized residuals, the difference between the actual and predicted mortality rates divided by the standard error of that difference, were used to compare the results of the various analyses. In addition, the reproducibility of the identification of "outliers", hospitals whose standardized residuals were above +1.96 or below -1.96, was evaluated by ascertaining what fraction of outliers found in one year were still outliers in a subsequent year and what proportion of outliers on first-occurring admissions in 1986 were also outliers when last-occurring admission were analyzed.

SUMMARY

The tabulation of the numbers of cases at risk (i.e. the number of patients whose last discharge in 1986 was from the given hospital), of the percentage of these persons who died within 30 days of the date of admission for that hospitalization, and of the range of predicted mortality rates encompassing 95% of the probable values on the logit scale forms the core of the present publication. The observed overall mortality rates of approximately 4% of the hospitals place them more than 1.96 standard errors above the rate predicted for the case-mix of the patients of that same hospital. However, this quantity is very dependent on the precise formulation of the variance. If the interhospital variance is omitted, the number of "high outliers" rises to about 11%. In contrast, the number of "high outliers" computed by means of multiple linear regression is 2.5%. However, the variance, or more precisely, the standard error appears to behave as a scale factor affecting the shape of the distribution but to have little influence on the position of a hospital relative to the others. Thus, the Spearman correlation coefficient of residuals and of standardized residuals is about 0.95, i.e., the order is determined predominantly by the residual itself, the difference between the observed and the predicted mortality rates.

The stability of the predicted mortality rates when the case-mix of the hospital is held constant is attested to by the results of cross-validation: the Spearman correlation coefficients of standardized residuals calculated from the vector of covariates and regression coefficients estimated in the same subset with standardized residuals obtained from the same vector of covariates but regression coefficients estimated in the complementary subset are 0.99 or higher for various diagnostic categories including the most heterogeneous, cancer. In contrast, the Spearman correlation coefficients of standardized residuals obtained in successive boot-strap iterations, in which the case-mix of the hospital is allowed to vary but other characteristics are implicitly held constant, lie in the range 0.6-0.7. The implication of this last, which bears importantly on year-to-year stability of rankings, is that there remain important causes of variability in outcomes associated with variations in patient characteristics (such as severity of illness) and other factors that have not been taken into account in the models used in the present analyses.

Comparison of standardized residuals obtained by logistic regression at the patient level and by linear regression at the hospital level yields Spearman correlation coefficients that lie in the range 0.92-0.99 for the specific diagnostic categories. For the overall mortality rate, the Spearman correlation coefficient is 0.83. However, in this instance the logistic and linear model are specified differently. In the

logistic model, the results for overall mortality are obtained by simple aggregation of the results of the analyses of the specific diagnostic categories, plus the category "other", whereas in the linear model the diagnostic categories are treated as covariates. A rank-order correlation coefficient of 0.89 is also obtained when overall mortality assessed by indirect standardization is compared with the results of logistic regression. Multiple linear regression gives a convenient estimate of predictive power in the proportion of the variance accounted for by the model. For last-occurring admission and specific diagnostic categories this lies in the range of a few percent to 37%, the latter applying to the category "cancer." For overall mortality, this quantity is 59%. Almost the entire (95%) predictive power of the model for overall mortality is accounted for by ten patient characteristics: age over 85, severe acute heart disease, sepsis, pulmonary disease, cancer as a comorbidity, cerebrovascular accidents, renal disease as a comorbidity, metabolic and electrolyte disturbances, severe chronic heart disease, and age between 70 and 74.

The validity and utility of the approach used herein is best tested by comparing the results of analyses of first-and last-occurring admissions in the same calendar year and of patterns observed in successive years. When comparing first-and last-occurring admissions it is important to note that about two-thirds of hospital patients have only one discharge in a given calendar year and that one-third have multiple admissions. Therefore, some correlation will be forced by the overlap of first and last-occurring admissions. The average probability of death within 30 days of a first-occurring admissions in 1986 was 6.9% and that for the last-occurring admission was 11.7%. Clearly, these hospitalizations are associated with very different risks. For 1986 discharges, the Spearman correlation coefficient of standardized residuals for first-and last-occurring admissions was 0.83. In addition, about two-thirds of the hospitals identified as high outliers for first admissions were also high outliers based on analysis of outcomes of last-occurring admissions (71% if the interhospital variance term was not used in the calculation of the standardized residual and 64% if it was).

The Spearman correlation coefficients of standardized residuals for last-occurring admissions in 1985 and 1986 were 0.61 (0.57 if the interhospital variance component is included in the variance) and 0.51 (0.48) when 1984 and 1986 rankings are compared. The concordance of high outliers in 1985 and 1986 was 48% and for 1984 and 1986 it was 44%.

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